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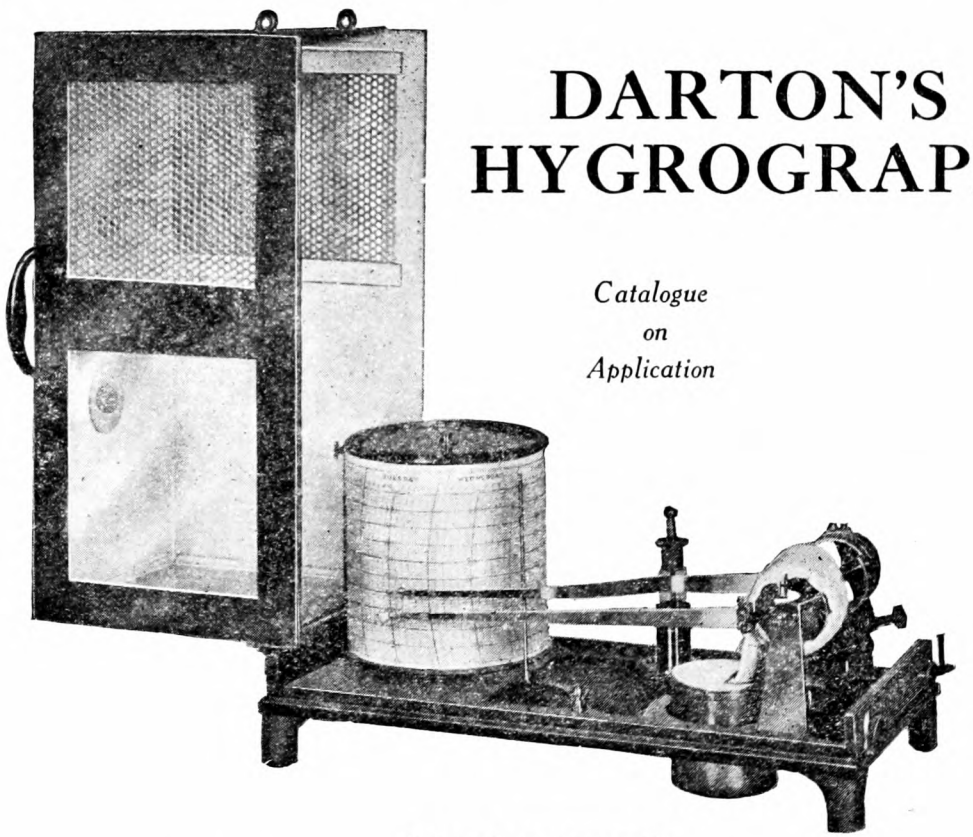

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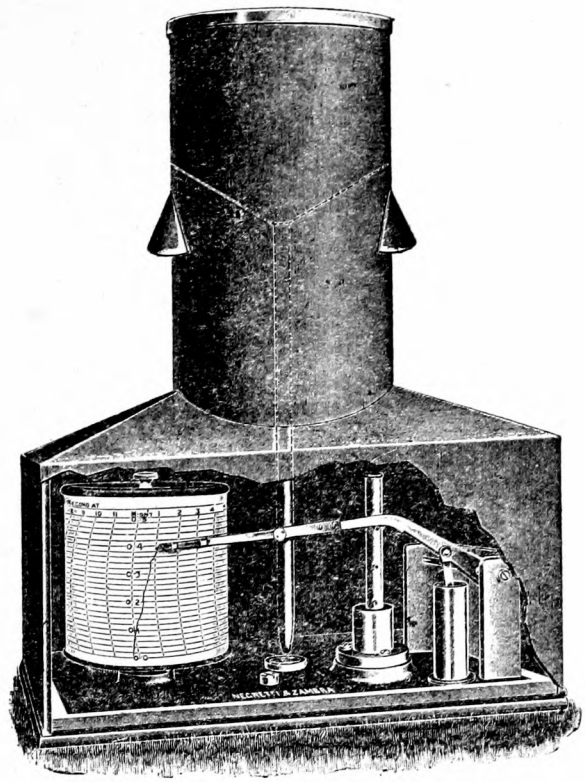

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BRITISH RAINFALL,

1928.

AVERAGE ANNUAL RAINFALL (INCHES)

NORFOLK

1881—1915

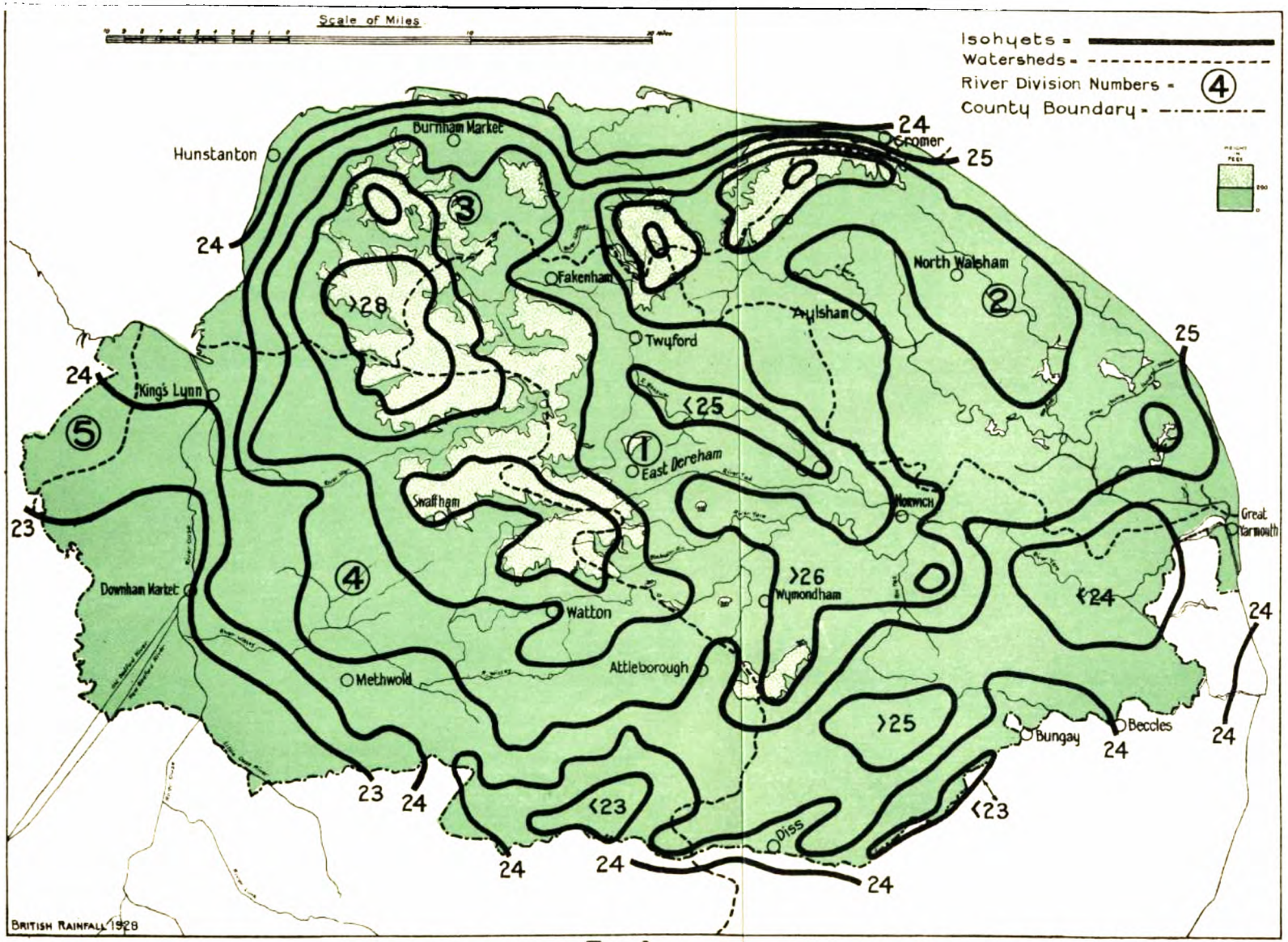

FIG. 1

British Rainfall.
1841 1540 F750, 7/29

Frontispiece.

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METEOROLOGICAL OFFICE—AIR MINISTRY.

BRITISH RAINFALL, 1928.

THE SIXTY-EIGHTH ANNUAL VOLUME OF THE
BRITISH RAINFALL ORGANIZATION.

REPORT ON

THE DISTRIBUTION OF RAIN

IN SPACE AND TIME OVER

THE BRITISH ISLES

DURING THE YEAR

1928

AS RECORDED BY OVER 5,000 OBSERVERS
IN GREAT BRITAIN AND IRELAND.

WITH MAPS AND ILLUSTRATIONS.

ISSUED BY THE AUTHORITY OF THE METEOROLOGICAL COMMITTEE.

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1929

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40—10—0—28.

Errata in "British Rainfall, 1927."

p. x. Number of Rainfall Records published.
1927 British Isles, *for* 4964 *read* 4970 ; *for* + 91 *read* + 97.

p. 154. Battle (Forewood W.W.), *for* 37·95 *read* 38·10.

p. 166. Fordham (London Ho.), *for* 36·47 *read* 26·47.

p. 171. Attleborough (Quidenham Hall), *for* 34·38 *read* 30·76.

p. 175. S. Brent (Didworthy San.), *for* 74·99 *read* 76·61.

p. 189. Evesham (Sewage Wks.), *for* 29·96 *read* 28·96.

p. 193. Nottingham (Mapperley Hill), *for* 32·83 *read* 31·44.

p. 194. Ashbourne Vicarage, *for* 37·27 *read* 40·08.

p. 198. Waterfoot (Cragg Res.), *for* 58·28 *read* 58·02.

p. 198. Bacup (Sheephouse Res.), *for* 42·52 *read* 44·52.

p. 266. Between 1887–88 and December *insert* October and *add*
A good deal of snow fell in the second week of October, 1887, the ground being white in London on the 12th. In the last week it again fell heavily in some parts.

p. 268. 1895–96, *add*
In 1895 the last week in October brought the most important snow spell almost of the whole winter, though London practically escaped-

p. 277. Line 16, *for* 1877–78 *read* 1878–79.

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BRITISH RAINFALL, 1928.

PART I.

THE WORK

OF THE

BRITISH RAINFALL ORGANIZATION.

BRITISH RAINFALL, 1928.

PART I.

THE WORK OF THE BRITISH RAINFALL ORGANIZATION.

THE STAFF OF OBSERVERS.

The detailed account of the rainfall of the year 1928 over the British Isles, which is presented in this volume, follows the lines of previous issues. The basis of the discussion is a collection of more than 5,000 returns of rainfall measurements for the year received from all parts of the country. The measurements are generally made every day, but in inaccessible districts they may be made only once a week or even once a month. Only a small number of the observers receive payment from the Meteorological Office; the great majority of the rainfall returns are contributed either by private persons, who measure the rainfall primarily as a matter of private interest, or by public local authorities, and especially the authorities of water undertakings, who find that a knowledge of the rainfall over their gathering grounds is indispensable to them in their work. These two classes of observers forward copies of their observations voluntarily for preservation by the British Rainfall Organization of the Meteorological Office as national records, and for use not only in the preparation of the annual volumes of *British Rainfall*, but also for purposes of study and research. In this way records which are primarily of local interest acquire a national value which was not always realized by those who initiated them. To the numerous voluntary observers who forward their observations the Organization desires to acknowledge its indebtedness: it would be quite impossible to compile such an account as this without their assistance and goodwill.

In order to ensure, so far as possible, that the various records of rainfall summarized in the volume may be comparable with one another, the Organization issues to each observer and to anyone who is interested, a copy of a pamphlet entitled *Rules for Rainfall Observers*. This pamphlet was originally drawn up by the late Mr. G. J. Symons, F.R.S., founder of the Organization, and although it has been extensively revised since his time, yet the fundamental rules laid down by him remain practically unaltered. A general issue of the latest edition of *Rules* was made to every observer on the books in December, 1928.

The total number of records printed in Part III of this volume is 5,067, an increase of 97 records over last year. The increase in the number of records in *British Rainfall*, 1927, over that for 1926 was also 97. The number has again passed the 5,000 level. It is shown in the table on p. xi that the last year on which this occurred was 1922,

when 5,126 records were printed. These, however, included a number of returns from check gauges and from self-registering gauges which were subsequently and are still, omitted. Actually 228 complete records for 1928 were received but not included in the volume for some such reason.

The total number of new records received for 1928 was nearly 300. There were net gains in 1928 in each of the four countries except Wales, where there was a net loss of 7 records. The counties with the largest net gains were Surrey and S. Devon. In Hereford there were 7 gains and no losses. Rutland is now represented by 2 stations instead of 1 only.

It has to be remembered that many of the losses and gains of records are accounted for by the omission and restoration in a subsequent year of records which temporarily become defective owing to various causes, e.g., a leaky gauge, a faulty exposure, temporary absence of observer, etc. The records from Garthbibio (Bwlch Tomlyd) in Montgomeryshire and Gearhameen in Co. Kerry are again included, being now obtained with new gauges.

Of the gains in the home counties, mention may be made of those from Edenbridge (Hever Castle), Sevenoaks (Knole Park), and Much Hadham (Lordship). A number of records are also included for the first time from the catchment area of the Torquay Waterworks to the north-east of Dartmoor. There are 5 new records from the neighbourhood of Dunford Bridge in Yorkshire, which have resumed after a lapse of a few years. The new stations started at Marton-in-Cleveland, Broken Scar Pumping Station, near Darlington, and Long Newton Reservoir, by the Engineer of The Tees Valley Water Board are likely to prove of particular use in connexion with the Biological and Chemical Survey of the River Tees which is taking place during 1929. A second record from Seathwaite is included for 1928 after a short break owing to a change of observer. A record from Rosthwaite, lower down the valley and nearer Derwent Water, is also included.

Of the gains in Wales reference should be made to those at Llandyssul (Talgarreg) in Cardiganshire, Trefeglwys, in Montgomery to the east of Plinlimmon, and at Cwm Prysor and Tyn Twll, near Trawsfynydd, in Merioneth ; isolated stations which are likely to be of particular use in checking the drawing of the isohyetal lines for the rainfall survey of Wales. There are four gains in Jersey and Guernsey and no losses.

The gains in Scotland exceeded the losses by 5. There are 6 additional records from the Dundee Waterworks, and 4 from the British Aluminium Company in Inverness-shire. On the other hand, there are 8 losses in Perthshire, mainly from private observers, compared with 4 gains. Of the gains in more isolated districts the following may be mentioned—Corrie Manse in the Isle of Arran, Hynish House in Tiree, and two records from N. Uist in the Outer Hebrides.

By far the most important gains are in Ireland, where 13 additional records were supplied by the Engineer of the Shannon Power Scheme, giving 5 gains in Galway and 4 in Roscommon. The two new stations in Leitrim and Cavan are nearly twice as wet as any of the other stations reporting from those counties. These add very materially to our knowledge of the rainfall of Ireland, and although the net gain in Ireland is only 6 the distribution of the stations is very much better than in former years.

A number of long rainfall records have also been received during the year from stations which have not previously reported to this Office. Among these the following may be mentioned :—Jedburgh (Crailing) in Roxburgh, 1903 to 1927 ; Norwich (Claremont Road), 1903–1926. The records from the three following stations fill useful gaps in our records :—Biggleswade Water Works (New Spring Pumping Station) in Hertford, 1916–1926 ; Bishops Cannings (Shepherds Shore) in Wiltshire, 1915–1927 ; and Leominster (Fairholme), 1913 to 1927. Among the shorter records the following may be mentioned :—Sevenoaks (Knole Park), 1922–1927 ; Luton (The Larches), 1923–1927, and Milnathort (Ochil Hills San.), 1922–1927.

Perhaps the most serious omissions from the General Table are those from stations which have been maintained for a long time and for which averages are available. Among these may be mentioned :—Geldeston (near Beccles) in Norfolk, Southwell (Elmfield) in Nottingham ; Monmouth (Pentwyn), Cowbridge (Ash Hall), Aberystwyth (Gogerddan), West Foulden in Berwickshire, Hillend Reservoir in Lanarkshire and Ballinrobe (Creagh House) in Mayo. Those from Upton Grey (Hoddington House) and Congleton (Buglawton) are omitted temporarily and will be available, it is hoped, next year.

For assistance in the collection of the rainfall returns for the year we are especially indebted to officials of various local organizations, among whom may be mentioned :—Mr. C. P. Sinclair, of the Hertfordshire Natural History Society and Field Club ; Mr. R. H. Primavesi, of the Northamptonshire Natural History Society ; Mr. A. W. Preston, of the Norfolk Rainfall Association ; Miss Young, Librarian at the Barnstaple Athenaeum ; the Rev. F. P. Synge, of the Mid-Wessex Rainfall Association ; Mr. A. P. Jenkin, of the Cornwall Rainfall Association ; Mr. A. A. Barnes, of the Manchester and Stockport Rainfall Organization ; Miss Cordelia Marshall of Ambleside ; Mr. E. W. M. Murphy, of the Irish Rainfall Association ; and Mr. A. J. Jenkins, of Jersey.

British Rainfall, 1928, *compared with* 1927.

Number of Records Published.

	Gain.	Loss.	Difference.	Per cent. change in year.
England	251 ..	158 ..	+ 93 ..	+ 2·7
Wales, etc.	22 ..	29 ..	— 7 ..	— 1·6
Scotland	47 ..	42 ..	+ 5 ..	+ 0·6
Ireland	25 ..	19 ..	+ 6 ..	+ 2·5
British Isles	345 ..	248 ..	+ 97 ..	+ 2·0

Number of Rainfall Records Published in the Volumes of "British Rainfall" for the undermentioned Years.

Years.	England.	Wales, etc.	Scotland.	Ireland.	British Isles.	Change from previous year.	No. of Stations per 100 sq. mi.
1861 ..	333 ..	9 ..	109 ..	20 ..	471 ..	+ 47 ..	0·4
1871 ..	1038 ..	88 ..	311 ..	67 ..	1504 ..	+ 5 ..	1·2
1881 ..	1548 ..	131 ..	313 ..	153 ..	2145 ..	+ 41 ..	1·8
1891 ..	2091 ..	168 ..	359 ..	181 ..	2799 ..	+ 23 ..	2·3
1901 ..	2616 ..	253 ..	442 ..	195 ..	3506 ..	+ 13 ..	2·9
1911 ..	3705 ..	397 ..	701 ..	271 ..	5074 ..	+198 ..	4·2
1914 ..	3962 ..	450 ..	753 ..	288 ..	5453 ..	+ 83 ..	4·5
1919 ..	3419 ..	436 ..	766 ..	277 ..	4898 ..	—101 ..	4·1
1920 ..	3460 ..	453 ..	758 ..	281 ..	4952 ..	+ 54 ..	4·1
1921 ..	3577 ..	446 ..	784 ..	271 ..	5078 ..	+126 ..	4·2
1922 ..	3601 ..	470 ..	785 ..	270 ..	5126 ..	+ 48 ..	4·2
1923 ..	3406 ..	442 ..	754 ..	262 ..	4864 ..	—262 ..	4·0
1924 ..	3438 ..	438 ..	756 ..	248 ..	4880 ..	+ 16 ..	4·0
1925 ..	3437 ..	439 ..	750 ..	259 ..	4885 ..	+ 5 ..	4·0
1926 ..	3418 ..	442 ..	775 ..	238 ..	4873 ..	— 12 ..	4·0
1927 ..	3491 ..	448 ..	786 ..	245 ..	4970 ..	+ 97 ..	4·1
1928 ..	3584 ..	441 ..	791 ..	251 ..	5067 ..	+ 97 ..	4·2
Difference from 1927 :	+93 ..	— 7 ..	+ 5 ..	+ 6 ..	+97 ..	— ..	+0·08

County.	Records in 1927.	Records Lost.	Records Gained.	Records in 1928.	Records per 100 sq. mi. of area.
ENGLAND.					
London	58	2	1	57	49
Surrey	178	7	20	191	26
Kent	151	6	12	157	10
Sussex	168	9	14	173	12
Hampshire ..	174	10	12	176	11
Berkshire ..	52	3	7	56	8
Middlesex ..	56	3	4	57	27
Hertfordshire	83	4	6	85	13
Buckinghamshire	42	2	5	45	6
Oxfordshire ..	53	3	4	54	7
Northampton ..	63	1	4	66	7
Huntingdonshire	7	0	1	8	2
Bedfordshire ..	26	3	3	26	6
Cambridgeshire	44	2	5	47	5
Essex	105	2	3	106	7
Suffolk ..	61	5	3	59	4
Norfolk	83	6	6	83	4
Wiltshire ..	60	2	4	62	5
Dorsetshire ..	82	6	8	84	9
South Devon ..	171	7	19	183	11
North Devon ..	41	4	3	40	4
Cornwall ..	73	8	5	70	5
Somersetshire ..	156	3	14	167	10
Gloucestershire	98	5	3	96	8
Herefordshire	42	0	7	49	6
Shropshire ..	50	5	3	48	4
Staffordshire ..	60	4	4	60	5
Worcestershire	61	3	3	61	8
Warwickshire ..	42	2	6	46	5
Leicestershire	34	1	2	35	4
Rutlandshire ..	1	0	1	2	1·3
Lincolnshire ..	62	6	3	59	2
Nottinghamshire	54	4	3	53	6
Derbyshire ..	74	0	2	76	7
Cheshire ..	79	7	4	76	7
South Lancs. ..	122	1	1	122	18
Central Lancs.	75	1	2	76	14
North Lancs. ..	52	3	4	53	9
Yorkshire, W.R.	297	4	10	303	11
Yorkshire, E.R.	27	2	2	27	2
Yorkshire, N.R.	91	4	3	90	4
Durham	42	1	6	47	5
Northumberland	40	2	2	40	2
Cumberland ..	48	2	3	49	3
Westmorland ..	60	3	7	64	8
MONMOUTH, WALES, ETC.					
Monmouth ..	35	3	0	32	6
Glamorgan ..	58	4	2	56	7
Carmarthen ..	17	0	0	17	2
Pembroke ..	13	2	1	12	2
Cardigan ..	18	1	3	20	3
Brecon	86	10	1	77	11
Radnor	22	0	1	23	5
Montgomery ..	24	1	2	25	3
Flint	15	0	1	16	6
Denbigh	41	5	2	38	6
Merioneth ..	22	0	3	25	4
Carnarvon ..	53	3	1	51	9
Anglesey ..	11	0	0	11	4
Isle of Man ..	8	0	1	9	4
Channel Islands	25	0	4	29	38

County.	Records in 1927.	Records Lost.	Records Gained.	Records in 1928.	Records per 100 sq. mi. of area.
SCOTLAND.					
Wigtown ..	9	0	2	11	2
Kirkcudbright	14	0	0	14	2
Dumfries ..	17	3	2	16	1·5
Roxburgh ..	15	0	2	17	3
Selkirk	7	1	0	6	2
Peebles ..	13	2	1	12	4
Berwick	13	1	1	13	3
Haddington ..	15	0	0	15	6
Midlothian ..	37	2	0	35	10
Linlithgow ..	18	0	1	19	16
Lanark	43	2	1	42	5
Ayr	46	4	3	45	4
Renfrew ..	43	1	0	42	17
Dumbarton ..	23	0	0	23	9
Stirling	37	0	1	38	8
Bute	6	0	1	7	3
Argyll	77	4	4	77	2
Clackmannan ..	7	0	1	8	15
Kinross	4	0	1	5	6
Fife	37	2	2	37	7
Perth	70	8	4	66	3
Angus (Forfar)	33	4	6	35	4
Kincardine ..	13	0	0	13	3
Aberdeen ..	36	1	2	37	2
Banff	10	0	0	10	2
Moray (Elgin) ..	9	0	2	11	2
Nairn	5	1	0	4	2
Inverness ..	66	4	9	71	2
Ross & Cromarty	29	2	0	27	0·9
Sutherland ..	9	0	1	10	0·5
Caithness ..	10	0	0	10	1·4
Orkney	11	0	0	11	3
Shetland ..	4	0	0	4	0·7
IRELAND.					
Cork	21	2	1	20	0·7
Kerry	13	2	2	13	0·7
Waterford ..	8	3	0	5	0·7
Tipperary ..	14	1	1	14	0·8
Limerick ..	9	1	0	8	0·8
Clare	5	0	1	6	0·5
Wexford ..	7	0	0	7	0·8
Kilkenny ..	3	1	1	3	0·4
Wicklow ..	9	1	1	9	1·1
Carlow	5	0	0	5	1·4
Leix (Queen's Co.)	4	0	0	4	0·6
Offaly (King's Co.)	7	0	1	8	1·0
Kildare	2	0	0	2	0·3
Dublin	28	3	0	25	7
Meath	6	0	0	6	0·7
Westmeath ..	8	1	1	8	1·1
Louth	4	0	1	5	1·6
Longford ..	4	0	0	4	0·9
Galway	5	0	5	10	0·4
Roscommon ..	2	0	4	6	0·6
Mayo	9	1	0	8	0·4
Sligo	2	0	0	2	0·3
Leitrim	2	0	1	3	0·5
Cavan	3	0	1	4	0·5
Fermanagh ..	4	0	0	4	0·6
Monaghan ..	1	0	0	1	0·2
Armagh	5	0	0	5	1·0
Down	14	2	0	12	1·4
Antrim	21	0	3	24	2
Londonderry ..	10	1	1	10	1·2
Tyrone	5	0	0	5	0·4
Donegal ..	5	0	0	5	0·3

CHECKING OF RECORDS.—Every record of rainfall which is published in Part III of this volume goes through a process of examination before it is included in the table. This consists in the plotting of the monthly and annual totals of rainfall and of the annual numbers of rain days and wet days on large scale maps, of which all except the map of rain days are reproduced in the volume on much reduced scales. Isohyetal lines or lines of equal numbers of rain and wet days, as the case may be, are then drawn on the maps. As a rule, the data are seen to be arranged regularly, in a manner depending on known principles, as discussed in an article by Dr. Glasspoole, in Part IV., but it is sometimes found that values for a certain station are inconsistent with those reported from neighbouring stations. The inconsistency may occur only in a single month, or it may extend over the whole year. The return in question is then examined in detail and compared with returns from neighbouring stations, when a probable explanation of the discrepancy often suggests itself. A slip in arithmetic may have occurred ; a decimal point may have been misplaced ; observations may have been missed during a holiday ; a deputy observer not quite familiar with the work may have blundered ; the amounts may be entered to the wrong day ; actual mistakes may have been made in measurement, especially in measurements exceeding half-an-inch ; the gauge may be unsound, giving rise sometimes to low, sometimes to high measurements ; the gauge may have become sheltered by the growth of trees, bushes, or vegetables ; the site of the gauge may be unsuitable. The possibilities of mistake are numerous—apparently endless—and often unexpected. Thus, more than one observer has been known to copy data for the wrong year in a part of his return. A communication is then sent to the observer, setting out the circumstances and the difficulty, and, if possible, suggesting a probable explanation. Generally a satisfactory result ensues, although in many cases the real values for the doubtful entries must remain unknown, and only estimated values can be substituted. In certain cases returns are scrutinized and checked fully before the totals are plotted on the maps. It is thought that very few important mistakes are passed over.

The special features of the volume appear in Part IV. This year two articles are printed in this part ; one is contributed by Mr. F. Hudleston, M.Inst.C.E., of Hutton John, Penrith ; this continues his account of the experiments which he is making at Hutton John into the effects on rainfall measurements of unorthodox exposures, and of the steps which can be taken to mitigate those effects. His previous contributions appeared in *British Rainfall,* 1926 and 1927. Mr. Hudleston does not refer to the time and trouble which he and members of his family have personally expended on this investigation. The important results are obtained in wet, windy weather, and after or during a fall of snow, just when conditions are least suited to the

comfortable execution of the measurements. Observers who measure rainfall in exposed localities and especially water engineers, are invited to peruse his article with attention, for it contains much information that can be often applied with advantage to the improvement of the sites of rain-gauges in exposed localities.

The second article by Dr. J. Glasspoole, of the staff of the Organization, contains a detailed account of the average rainfall of Norfolk and of the fluctuations of rainfall in that county. It is intended to indicate the method adopted in preparing the rainfall maps of the " Rainfall Survey " of the British Isles on the scale of $\frac{1}{2}$ an inch to the mile, and to serve as an example of the kind of information which is available for most parts of the country.

INSPECTIONS.—During the year ended 31st March, 1929, 225 rainfall stations were inspected. These included a number of stations within the gathering grounds of the Metropolitan Water Board, and of the Liverpool, Bolton, Huddersfield, Blackburn, Birkenhead, Llandudno, Rhyl and South Staffordshire water undertakings. They included also rain-gauges in Worcestershire, Warwickshire, Staffordshire and South Devon which were inspected in connexion with the Rainfall Survey.

SURVEY MAPS.—The work on the detailed average annual rainfall map of the British Isles on the scale of two miles to the inch, for the period 1881–1915, has been continued. The map has been extended to cover the counties of Hereford, Dorset, Cheshire, Stafford and Worcester, while substantial progress has been made with data for stations in Devonshire, Somerset, Wiltshire and Warwickshire. The Survey has now been completed for the whole of Wales, the Isle of Man and the following counties :—Dorset, Monmouth, Hereford, Worcester, Shropshire, Stafford, Cheshire, Nottingham, Huntingdon, Cambridge and Norfolk. If to the counties for which the survey is complete or in hand are added those for which similar maps on the same scale, but for different periods, had already been prepared by Dr. H. R. Mill in connexion with the series of county survey memoirs published by the Geological Survey, and also the maps prepared by him as evidence in parliamentary proceedings connected with water supply, then it can be said that practically the whole of England and Wales and a considerable part of Scotland, will shortly have been mapped on the scale of 2 miles to the inch. Owing to the use of different periods for the earlier work, the isohyetal lines are not necessarily continuous at the boundaries between the older and newer maps. It is proposed later on to remedy this by revising the older maps. In the meantime the survey is being extended to Scotland, where the average rainfall of considerable areas has not hitherto been mapped on the large scale employed.

INQUIRIES.—A large number of inquiries regarding the rainfall of various parts of the country was dealt with. Among the more important of these, the following may be mentioned :—

(1) Evidence was given before a Committee of the House of Lords in connexion with the Bury and District Joint Water Board Bill.

(2) A report was prepared on the average annual rainfall over the gathering ground of the Birkenhead Corporation in connexion with a Parliamentary Bill.

(3) Data were furnished to the Windermere Gas and Water Co. in connexion with a Parliamentary Bill.

(4) Values of average annual rainfall over a number of gathering grounds, and values of rainfall during specified years, were supplied to the Ministry of Health in connexion with a report on Compensation Water.

(5) Statistics of the duration of various intensities of rainfall in different parts of the country were supplied to the Ministry of Health, in connexion with the preparation of local regulations governing the dimensions of sewers to carry flood waters.

OBITUARY.—During the twelve months 1st July, 1928, to 30th June, 1929, reports have been received of the deaths of 53 observers who have contributed to volumes of *British Rainfall.* Of these fifteen have kept rainfall records, or been associated with relatives who have kept records for more than 30 years. A list of these is given below. In most cases the records have been maintained throughout by the same observer.

Name.	Last place of observation.	No. of years' records.
Hon. A. J. Peckover	Wisbech, Cambs.	69
Miss Dowson	Geldeston, Norfolk	62
Canon J. T. Harding	Rochfield, Monmouth	49
Miss Foster	Lostwithiel, Cornwall	46
Miss Pasley	Botley, Hants.	45
C. R. Rivington	Appleby, Westmorland ...	38
W. C. Welch	Hampson-in-Ellel, Lancs. ...	37
Lt.-Col. J. H. Hamersley ...	Budleigh Salterton, Devon ...	36
Dr. J. W. Smith	Ryton-on-Tyne, Durham ...	35
J. Sandercock	Devonport, Cornwall	34
Mrs. T. Mason	Kirkby Stephen, Westmorland .	34
W. Haynes	Reading, Berks....	32
P. Smith	Great Clacton, Essex	30
W. L. Horn	North Walsham, Norfolk ...	30
W. E. Austen	Reading, Berks....	30

BRITISH RAINFALL, 1928

PART II

RAINFALL AND METEOROLOGY

OF

1928

(66/91)

1. A BRIEF SUMMARY OF THE RAINFALL OF THE YEAR, 1928.

Although 1928 was the sixth successive year in which the rainfall over the British Isles as a whole was in excess of the average the year is more likely to be remembered, in most of England and Wales at any rate, for its sunshine; and a summer, apart from June, favourable to holiday makers. For the British Isles as a whole, 1928 with 118 per cent. was as wet as 1927, but the distribution of the rainfall in the two years differed considerably. The year 1928 was wetter than 1927 over most of Scotland and Ireland, but drier in England and Wales. Both 1927 and 1928 were wetter over the country generally than any other year since 1903, and in the last sixty years there were only four wetter years, *viz.*, 1872, 1877, 1882 and 1903 with 137, 127, 120 and 127 per cent. respectively. The rainfall of 1928 was most remarkable in Ireland, where 1872 was the only wetter year.

The table below, which gives the general values over the British Isles as a whole and the countries separately since the famous dry year 1921, shows the unusual wetness of recent years. In fact, we have to go back to the 'seventies to find so long a run of wet years. The rainfall of each of the nine years 1875 to 1883 reached or exceeded the average. A run of six consecutive years each with an appreciable excess is, however, unprecedented.

Annual Rainfall as per cent. of Average, 1881–1915.

	1922	1923	1924	1925	1926	1927	1928
	%	%	%	%	%	%	%
England and Wales	105	113	120	106	102	123	115
Scotland	94	120	105	100	111	114	123
Ireland	92	110	122	99	100	108	126
British Isles	100	114	117	104	103	118	118

Since 1906, i.e., during the last 23 years, only six years have been drier than the average of the period 1881 to 1915. The wet years have so predominated that we have received in the 23 years a rainfall appropriate to 24 years. During the early part of this period the excesses were contributed more especially by wet winters, of more recent years the summers were particularly wet, but 1928 reverted to the earlier type.

Each of the six summers, 1922-27, was wetter than the average, so that the summer of 1928 stands out in comparison as unusually dry, although the deficiency over the country generally only amounted to 1 per cent. Over most of Scotland and Ireland and in the north of England the rainfall of the summer was in excess of the average. Over England and Wales as a whole the summer with 90 per cent. was the driest since that of 1921. Considerable areas

stretching across the country from Lands End to the Wash received less than 80 per cent. At Abergavenny, in Monmouthshire, there was little more than half the average amount during the summer.

The statistics of rain-days and wet-days for 1928 show similar characteristics. In both Scotland and Ireland there were more rain-days in 1928 than 1927, while in England and Wales there were more in both 1927 and 1923 than in 1928. The number of rain-days was markedly in excess of the average at the beginning and end of the year, but during the summer six months the mean value for the British Isles was exactly the average. The frequency of wet-days was most noteworthy in Ireland where the number was the largest since before 1917.

The main features of the monthly rainfall of 1928 was the wet January, the wettest over the country generally in the last 60 years, the wet June, especially in Scotland and Ireland, and the four dry summer months April, May, July and September. May was the driest month of the year over Wales, Scotland and Ireland, but September was somewhat drier over England.

As would be expected the number of *Droughts* during the year was rather fewer than usual, and the number of *Rain Spells* appreciably in excess of the average number. The number of *Wet Spells* was, however, more remarkable, being far in excess of that for any year since before 1917.

The year was not particularly remarkable for heavy falls on rainfall days (Section 7), and owing to the sparsity of falls due to thunderstorms the majority of heavy falls on record were associated with Atlantic depressions. The greatest amount measured in a day in 1928 was 7·77 inches on June 28th at Blaenau Festiniog in North Wales. This is the eighth largest daily fall on record, the first being one of 9·56 inches at Bruton, Somerset, on 28th June, 1917. In the same way the number of intense falls in short periods was considerably fewer than usual (Section 6). The year 1928 was remarkable for the small number of intense falls in short periods in all months but August.

Perhaps the most striking incident in the rainfall of the year was, however, a violent thunderstorm at Armagh Observatory, a locality remarkable for its freedom from very heavy rains. As much as 1·69 inches was recorded in 50 minutes, of which 1 inch fell in 20 minutes on August 29th. Two photographs taken after this storm are reproduced in Section 6.

Reference should perhaps also be made to the disastrous flood in London on January 7th, 1928, when the river overflowed its banks. Loss of life and much damage were produced in low-lying parts of London. The flood was, however, due to the combination of a spring tide and a strong N.W. wind over the North Sea, rather than to the heavy rain of the period or to the fact that the non-tidal part of the river was in flood on account of the melting of the snows which fell at about Christmas, 1927.

2. THE DISTRIBUTION OF RAINFALL IN TIME.
THE NUMBER OF RAIN-DAYS AND WET-DAYS IN 1928.

The following definitions have been used in *British Rainfall* in order to obtain a homogeneous series of statistics :—

A *rain-day* is a period of 24 hours, commencing normally at 9 a.m. on which ·01 inch, or 0·2 mm. or more of rain is recorded.

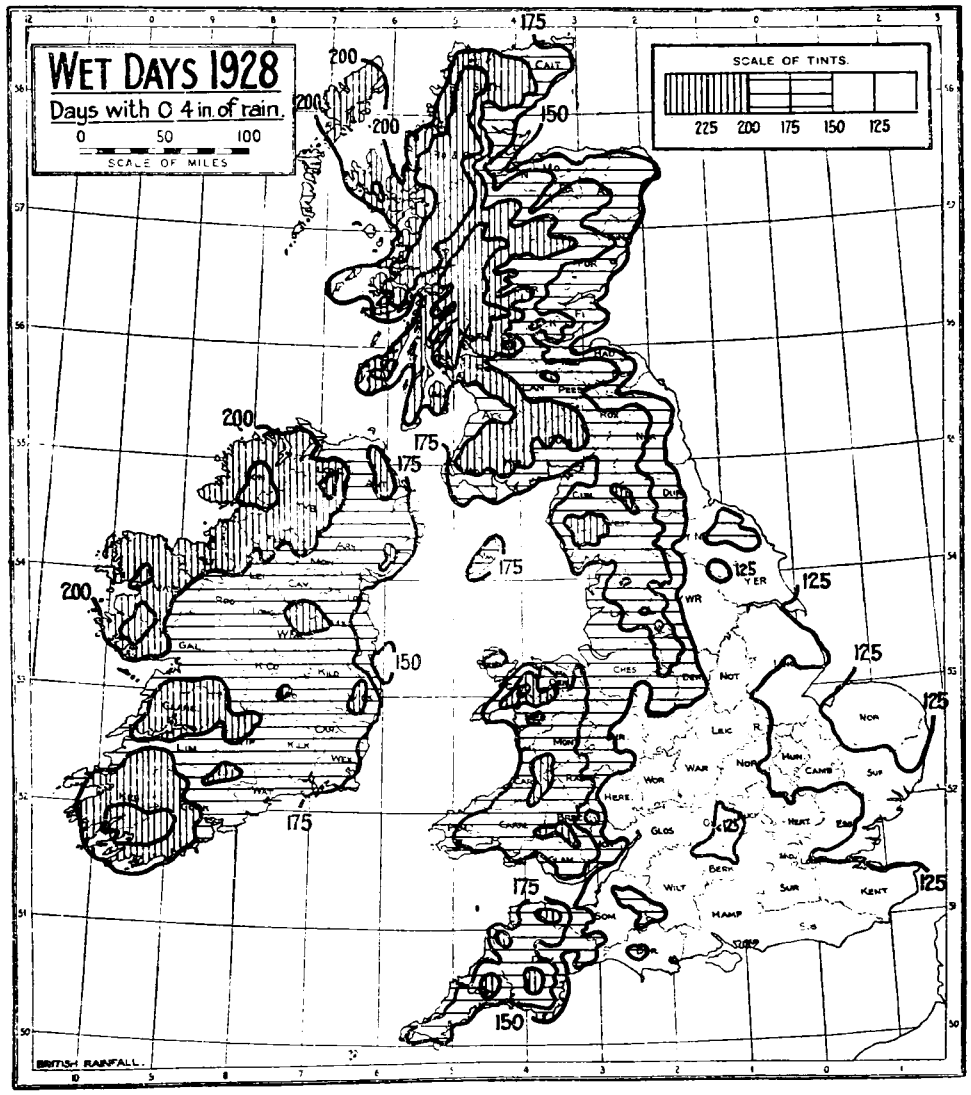
A *wet-day* is a period of 24 hours, commencing normally at 9 a.m. on which ·04 inch, or 1·0 mm. or more of rain is recorded.

The former definition dates from the year 1865, the latter was adopted only 12 years ago. Each of the terms " rain-day " and " wet-day " is open to criticism, the latter particularly so, since it has a different meaning in ordinary use. It must, therefore, be understood that whenever these terms are used in this publication the meanings set out above are always to be attached to them.

For reasons which are set out in detail in the article entitled " The distribution over the British Isles in time and space of the annual number of days with rain," in *British Rainfall*, 1926, there is frequently a lack of harmony in the annual values of adjacent stations. In fact, the observed differences are sometimes so much greater than that of any other climatic factor, that there is little doubt that some of the individual values are incorrect. Statistics of wet-days were found to be much more consistent. It was this reason, coupled with the fact that similar data are published for certain other countries of Europe, which led to the introduction of statistics of wet-days.

Latterly, however, attention has been re-directed to the improvement of the statistics of rain-days. The Meteorological Office has standardised a new taper measure and new regulations for reporting small quantities of rain have been brought into use.

On the taper measure there is a graduation marked ·005; this graduation is to show the limit between the amounts which count as ·01 inch, and those which are mere " traces."



Number of "Wet Days" in 1928.

The circumstances in which the entry "trace" or "tr" is to be made in the daily register are as follows :—

(*a*) When there is less than .005 in. of water in the gauge and the observer knows that this is not the result of a drop or two draining from the sides of the can after emptying the rain-water out of it at a previous time of observation, i.e., the observer must be reasonably certain that there has actually been precipitation since the preceding measurement. If the observer knows that the precipitation has been in the form of dew or wet fog this may be noted.

(*b*) The observer knows definitely *from his own observation* that some rain (or other form of precipitation such as snow, hail, sleet or drizzle) has fallen since the preceding

observation, and yet finds no water in the gauge. This happens sometimes especially in dry, warm weather, without the gauge being even damp, the small amount of rain having evaporated before it got into the receiving can.

Observers who distinguish carefully between measurements of "trace" and of ·01 inch, in the manner set out above, will feel confident that their statistics of rain-days are correct. If such a precise distinction is not made, doubt may attach to the statistics of rain-days. The desirability of using taper-measures is therefore evident.

Information as to the number of rain-days and wet-days during the year is set out in this volume in various forms. As usual, the General Table of rainfall in Part III of this volume shows the number of rain-days and wet-days in 1928 as reported from each station at which daily observations were made. The number of wet-days have been plotted on a large map of which the illustration on p. 5 is a reduced copy. The distribution of the numbers is shown on the map in the usual manner.

In order to study the distribution of rain-days and wet-days throughout the year, 100 stations have been selected to represent as uniformly as possible the conditions over the whole of the British Isles, and the numbers of rain-days and wet-days for each month as well as for the whole year have been extracted from the returns from these stations and printed in Table V. Monthly general numbers (for England and Wales, Scotland, Ireland and for the British Isles) have been worked from these data and they are shown in the table in heavy type. The annual mean values for 1928 are shown again in Tables I and III and the monthly mean values for 1928 in Tables II and IV, where in each case they can be readily compared with similar values for the intervening years from 1917 ; and with the averages.

The distribution of the annual number of wet-days is very similar to that of other years. The range is from less than 125 days in the neighbourhood of the Thames Estuary, near Oxford, and in part of the Fen District, to rather more than 225 days in the mountains of Kerry, Connemara, Donegal and Londonderry and the Western Highlands of Scotland. As many as 200 to 225 wet-days occurred during the year in parts of South and Central Wales, in Snowdonia and the English Lake District. The general values, given in Table III, indicate that the frequency of wet-days was most noteworthy in Ireland, where the number of wet-days is the largest in the series. Over Scotland there was only one year with as many wet-days, viz., 1923, with 206. The number for England and Wales was exceeded in 3 other years. The number of wet-days over the British Isles generally in each month is given in Table IV. The months with fewest wet-days in 1928 were May with 8 and September with 9, while the months with the greatest number of wet-days were January, with 23 and October, November and December with 19, 18 and 17 respectively. In

January there were 3 more than in any other January, and more than in any other month since 1917. The values of 8 and 16 for May and June were the same as in 1927. This is the smallest number for May and the largest for June. Apart from 1923, when the general number of wet-days was 182, the year 1928 with 175 gave the largest number.

In dealing with the general numbers of rain-days, given in Tables I and II, it is possible to compare the values for 1928 with computed averages for the 35 years, 1881 to 1915. It is shown in Table I that over the British Isles as a whole there were 225 rain-days or 21 more than the average number. This was 2 more than in 1927 and a larger number than in any year since 1904, with the one exception of 1923. There were 27 more than the average in Ireland, 23 more in Scotland and 16 more in England and Wales. In both Scotland and Ireland there were more rain-days in 1928 than in 1927, although less than in 1923, while in England and Wales there were more in both 1927 and 1923. During the year the mean number of rain-days per month was 19 or 2 more than the average. Of these 15 received sufficient rain to rank as wet-days. There were 5 more rain-days than wet-days in March, April, November and December and only 3 more in May and September. Table I also demonstrates the recent run of years with rain-days in excess of the average. In fact, during the last 11 years the mean annual number of rain-days is as many as eleven and a half in excess of the 35 years' average, even although the very dry year 1921 is included. Such a large departure from the average, which represents an accumulation of 127 rain-days in excess of the average, is unusual. In other words, judging from all the records at our disposal the frequency of rain-days during the last 11 years must not be regarded as the normal state of affairs and a return to more normal conditions in the future can be confidently anticipated.

There was less than the average number of rain-days in 1928 only in May, July and September when the deficiencies amounted to 4, 2 and 3 days respectively (see Table II). The month with the largest excess of rain-days was January with 8 more than the average. There were 6 more in June and 4 more in both October and November. The number of rain-days was markedly in excess at the beginning and end of the year but the summer six months recorded exactly the average number of 92.

There is no instance in Table V of a month without a single rain-day or wet-day. Only one wet-day was recorded in September at Lympne Aerodrome, Kent, and at Hodsock Priory in Nottinghamshire. In both these districts there was an unusually large number of days with small amounts of rain. West Witton in Yorkshire recorded 11 rain-days during this month but only 2 of them received sufficient rain to rank as wet-days. A few stations in the south-east of England recorded only 4 rain-days in September. There was rain on every day

of a month at more stations than usual. During January there was rain on every day at only one station in England, one in Wales, and two in Scotland, but in Ireland at 7 out of 23 stations mainly in the south-west and west. Rain fell at Balmoral Castle on every day in March.

Table I.—*Annual General Number of Rain-days (Days with ·01 in. or more) in* 1917-1928, *compared with Average,* 1881-1915 †.

Year.	England and Wales. Average 188.			Scotland. Average 217.			Ireland. Average 220.			British Isles. Average 204.		
	Rain Days.	Diff. from Aver.	Per cent. of Aver.	Rain Days.	Diff. from Aver.	Per cent. of Aver.	Rain Days.	Diff. from Aver.	Per cent. of Aver.	Rain Days.	Diff. from Aver.	Per cent. of Aver.
1917	185	− 3	98	217	0	100	224	+ 4	102	203	− 1	100
1918	200	+ 12	106	226	+ 9	104	227	+ 7	103	214	+ 10	105
1919	191	+ 3	102	214	− 3	99	213	− 7	97	203	− 1	100
1920	203	+ 15	108	232	+ 15	107	243	+ 23	110	220	+ 16	108
1921	158	− 30	84	224	+ 7	103	217	− 3	99	190	− 14	93
1922	196	+ 8	104	234	+ 17	108	226	+ 6	103	214	+ 10	105
1923	216	+ 28	115	257	+ 40	118	253	+ 33	115	236	+ 32	116
1924	202	+ 14	107	237	+ 20	109	248	+ 28	113	223	+ 19	109
1925	192	+ 4	102	231	+ 14	106	230	+ 10	105	212	+ 8	104
1926	192	+ 4	102	234	+ 17	108	226	+ 6	103	211	+ 7	103
1927	208	+ 20	111	233	+ 16	107	238	+ 18	108	223	+ 19	109
1928	204	+ 16	109	240	+ 23	111	247	+ 27	112	225	+ 21	110

† The averages for the period 1881–1915 are based on the records from about 100 stations distributed as evenly as possible over the country. The selection of stations is described in an article in *British Rainfall*, 1926, p. 267, and the general number of rain-days in each year from 1881 will be found in Table I of that article.

Table II.—*Monthly General Numbers of Rain-days (days with ·01 in. or more) in* 1917 *to* 1928, *British Isles, compared with Average,* 1881-1915 ‡.

	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
1917 ...	15	12	19	16	13	14	12	23	17	25	20	17	203
1918 ...	20	20	12	12	13	13	19	17	25	22	16	25	214
1919 ...	23	12	20	18	11	16	11	16	16	14	20	26	203
1920 ...	24	17	21	23	19	13	24	13	17	13	16	20	220
1921 ...	25	9	23	11	17	7	12	20	11	16	16	23	190
1922 ...	24	20	17	18	13	15	21	19	17	12	16	22	214
1923 ...	22	24	15	17	19	13	18	21	20	25	19	23	236
1924 ...	22	15	10	16	23	17	20	23	20	19	16	22	223
1925 ...	18	23	16	19	23	5	16	17	21	19	15	20	212
1926 ...	24	20	14	17	19	14	14	17	16	17	24	15	211
1927 ...	23	16	21	18	12	20	18	21	22	17	21	14	223
1928 ...	27	17	21	16	11	20	14	19	12	23	23	22	225
Average	19	17	18	15	15	14	16	17	15	19	19	20	204

‡ The average general values for England and Wales, Scotland and Ireland separately are given in *British Rainfall*, 1927, p. 7, and are discussed in an article on *The Distribution over the British Isles of the average number of days with rain during each month of the year.*—Q.J.R. Meteor. Soc. Vol. 54, 1928.

Table III.—*Annual General Number of Wet-days* (*Days with* ·04 *in. or more*) *in* 1917 *to* 1928.

	England and Wales.	Scotland.	Ireland.	British Isles.
1917.. ..	134	174	176	155
1918.. ..	150	182	188	168
1919.. ..	143	172	171	158
1920.. ..	151	185	197	171
1921.. ..	110	177	166	142
1922.. ..	146	181	178	163
1923.. ..	159	206	198	182
1924.. ..	154	184	199	173
1925.. ..	143	179	180	162
1926.. ..	141	184	173	161
1927.. ..	156	184	185	171
1928.. ..	151	193	200	175
Average 1917-28	145	183	184	165

Table IV.—*Monthly General Numbers of Wet-days* (*Days with* ·04 *in. or more*) *in* 1917 *to* 1928, *British Isles.*

	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
1917 ..	11	8	14	13	10	10	9	20	12	21	15	12	155
1918 ..	15	17	9	9	10	9	15	12	22	16	13	21	168
1919 ..	19	9	15	14	8	12	8	12	13	11	15	22	158
1920 ..	20	13	17	19	15	10	19	9	13	9	12	15	171
1921 ..	20	5	17	8	13	5	10	15	7	12	12	18	142
1922 ..	20	16	13	14	9	11	16	15	13	8	11	17	163
1923 ..	15	20	11	13	14	8	13	17	16	21	16	18	182
1924 ..	17	9	7	12	19	13	17	18	16	15	12	18	173
1925 ..	14	19	11	15	18	3	12	13	15	14	12	16	162
1926 ..	20	15	9	12	15	11	11	13	12	14	19	10	161
1927 ..	19	13	17	13	8	16	13	17	17	13	15	10	171
1928 ..	23	13	16	11	8	16	10	15	9	19	18	17	175
Average 1917-28.	18	13	13	13	12	10	13	15	14	14	14	16	165

Table V.—*Number of "Rain-days" (·01 in. or more) and of "Wet-days" (·04 in. or more) in* 1928.

County and River Division.	Station.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Year.	Total Rain-fall.
ENGLAND AND WALES.															in.
London 2	St. Pancras (Camden Square)	21 18	11 9	19 12	17 8	11 11	13 11	7 6	19 14	5 3	20 15	16 11	16 14	175 132	26·00
Kent 2	Lympne Aerodrome	22 19	13 9	18 9	14 10	15 13	13 11	7 4	15 11	7 1	22 21	22 19	20 15	188 142	31·46
Sussex 3	Patcham (Brighton W.W.) ..	22 18	13 11	17 11	15 15	12 10	13 11	7 7	13 7	5 4	22 21	20 16	15 15	174 146	39·91
Hampshire .1	Ventnor (Royal National Hos.)	24 20	14 9	18 13	16 8	8 6	14 9	8 4	9 8	4 4	24 20	20 18	17 14	176 133	39·93
Hampshire .7	Selborne (The Wakes)	25 18	11 9	20 18	15 12	10 8	18 16	8 7	18 12	5 4	23 21	20 16	20 13	193 154	41·03
Berkshire ..5	Upton (Manor House)	19 15	12 10	22 17	15 9	12 6	16 9	7 5	18 9	6 3	21 15	17 11	21 10	186 119	23·28
Northants..4	Wellingborough (Swanspool)	22 15	11 10	18 9	15 10	9 8	19 12	10 5	13 9	4 4	21 14	22 13	17 12	181 121	24·64
Northants..4	Eye (Northolm).....	22 16	13 7	17 10	16 9	10 6	15 12	8 6	17 10	7 4	21 10	20 12	17 9	183 111	19·95
Cambridge .2	Cambridge (Botanic Gardens)	20 16	8 7	15 7	10 6	13 10	17 11	7 5	14 11	4 3	15 9	11 9	15 10	149 104	20·85
Essex.....3	Great Wakering.....	19 14	11 6	18 12	15 9	12 9	14 10	7 7	12 8	5 2	18 10	19 10	16 14	166 111	22·31
Suffolk 2	Haughley (Haughley House).	19 15	11 8	15 12	12 9	11 6	14 8	9 5	14 10	6 3	16 10	17 11	18 13	162 110	20·39
Norfolk 1	Gorleston	20 12	12 9	17 10	14 10	11 8	15 13	8 5	14 8	8 6	18 12	23 18	21 15	181 126	23·41
Norfolk....4	Sporle	23 18	12 10	19 10	15 12	17 10	21 17	10 8	18 16	10 6	18 12	23 12	26 13	212 144	27·32
Wiltshire...3	Larkhill (Sch. of Artillery) ...	21 16	12 9	17 12	14 9	13 6	18 12	8 5	11 8	6 5	22 20	20 14	16 13	178 129	26·19
Dorsetshire..3	Dorchester (Wollaston House)	25 18	15 13	21 16	14 8	11 7	18 8	9 5	11 9	4 4	20 20	18 14	18 17	184 139	42·40
SouthDevon 2	Launceston (Polapit Tamar)	29 22	16 14	23 21	18 13	13 7	17 11	14 9	19 15	8 6	24 22	26 18	24 17	231 175	45·79
SouthDevon 4	Holne (Church Park Cottage)	28 24	16 16	22 21	12 10	9 6	21 15	11 10	18 15	7 6	25 24	22 20	20 17	211 184	81·69
NorthDevon 2	Barnstaple (N.Dev.Athenæum)	30 25	18 13	24 21	16 9	10 6	19 15	13 11	17 13	13 7	26 23	26 17	23 16	235 176	42·90
Cornwall ...2	St. Austell (Trevarna)	30 24	18 18	21 20	18 11	13 9	15 11	11 11	17 14	7 7	26 23	23 18	25 22	224 188	52·08
Somerset ..1	Bath (Henrietta Park)	23 19	13 11	20 13	15 7	11 6	17 11	10 8	15 11	6 6	22 18	19 15	17 12	188 137	34·74
Somerset ..3	Angersleigh (Leigh Court) ...	25 18	17 14	23 17	15 11	7 6	19 14	10 7	19 11	8 5	24 20	25 19	18 12	210 154	36·75
Gloucester..4	Mickleton (Bank House)	22 15	13 9	21 13	15 9	11 8	19 13	9 4	16 10	8 4	22 16	20 12	17 11	193 124	24·24
Hereford ..1	Ross (Birchlea)	26 16	14 9	23 14	13 5	13 7	18 15	9 5	14 8	8 6	24 21	19 17	18 12	199 135	30·40
Shropshire .3	Bishops Castle (Castle St.)...	22 21	15 9	23 19	12 9	8 8	20 18	8 6	16 14	10 8	23 19	23 22	16 15	196 168	34·37
Shropshire .4	Shifnal (Hatton Grange)	25 20	18 10	20 10	16 11	11 7	19 16	12 6	16 12	9 8	23 18	20 15	15 12	204 145	27·84

Table V.—*Number of "Rain-days" (·01 in. or more) and of "Wet-days" (·04 in. or more) in 1928.—(con.).*

County and River Division.	Station.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Year.	Total Rainfall.
															in.
ENGLAND AND WALES—(*con.*)															
Staffs. 5	Ashbourne (Mayfield House).	25 19	17 14	21 17	18 9	11 4	20 17	12 7	18 13	6 4	21 16	22 17	20 15	211 152	40·11
Leicester ..4	Leicester (Stoughton Drive)..	21 19	15 12	18 12	16 10	10 8	18 13	8 4	15 13	10 7	23 16	20 16	16 11	190 141	25·36
Lincoln 3	Horncastle	19 14	13 8	17 11	14 10	12 8	17 11	7 4	15 13	8 4	16 13	21 13	20 11	179 120	24·07
Nottingham 5	Worksop (Hodsock Priory)..	24 17	19 12	22 11	18 7	15 8	14 10	7 2	16 12	6 1	17 13	22 17	18 11	198 121	24·39
Cheshire ...2	Northwich (Hunts Lock)	23 19	16 13	21 14	18 6	11 7	22 18	13 10	18 14	14 7	26 18	23 18	24 14	229 158	32·48
NorthLancs.5	Blackpool (Met. Observatory)	28 26	15 10	16 13	17 8	11 6	17 14	11 8	16 16	13 8	24 22	23 21	19 13	210 165	43·58
Yorks.W.R. 8	Meltham (Harewood Lodge).	26 23	19 15	24 16	18 13	15 9	22 17	13 6	20 16	10 6	24 18	23 20	24 14	238 173	53·70
Yorks. E.R. 3	Hull (Pearson Park)	27 20	15 10	23 16	20 7	14 9	20 12	12 4	14 10	8 3	21 15	25 17	23 12	222 135	26·51
Yorks. E.R. 4	Filey Vicarage	21 17	13 7	21 13	16 8	16 9	20 16	10 6	17 12	11 7	18 17	23 16	18 12	204 140	26·66
Yorks. N.R. 1	West Witton (Ivy House)...	26 22	22 16	27 19	15 6	15 12	19 17	8 6	21 19	11 2	22 19	22 17	16 11	224 166	42·80
Yorks. N.R. 2	Felixkirk (Mount St. John)..	24 17	13 8	24 14	17 9	14 8	19 14	9 5	16 11	9 5	18 13	20 11	19 11	202 126	28·21
Durham ...2	Sunderland (W. Hendon Ho.)	20 14	14 7	23 12	14 9	16 9	18 15	7 5	19 13	14 9	15 12	20 15	18 12	198 132	25·55
North'land .6	Ilderton(LilburnTowerGdns.)	24 20	17 11	27 23	18 9	11 7	18 14	8 6	19 16	17 8	21 16	20 13	19 15	219 158	35·08
Cumberland 1	Geltsdale	28 22	19 14	24 17	16 7	12 10	24 21	18 12	22 21	17 10	26 19	26 16	22 18	254 187	49·90
Westm'land 2	Grasmere (The Wray)	31 29	21 19	23 19	20 14	10 9	23 19	16 11	22 20	15 15	26 23	23 20	21 18	251 216	136·75
Glamorgan .6	Treherbert (Tyn-y-waun)....	29 24	19 15	24 23	16 13	8 5	22 17	15 12	18 16	11 9	26 23	24 20	22 17	234 194	120·87
Carmarthen 2	Carmarthen (The Friary) ...	26 23	15 13	20 16	16 12	11 7	21 19	15 12	19 17	7 7	24 23	23 18	26 21	223 188	62·65
Pembroke..4	Haverfordwest (Portfield) ...	29 24	16 13	22 16	18 9	10 6	19 15	16 12	18 14	8 8	24 24	20 17	24 21	224 179	57·24
Cardigan ..3	Lampeter (Falcondale)	31 25	16 14	20 15	17 15	9 6	21 20	13 9	17 14	10 8	24 22	22 22	23 20	223 190	61·67
Denbigh ...2	Denbigh (Garn)	21 16	13 11	14 12	14 7	11 9	24 18	11 6	16 15	14 12	20 16	25 20	26 18	209 160	36·51
Merioneth..4	Dolgelly (Bryntirion)	29 26	17 13	21 15	16 12	11 9	23 17	15 13	19 17	11 7	25 21	25 19	23 21	235 190	73·83
Anglesey....	Llanerchymedd (Ll'diarth Es.)	28 21	18 13	23 16	15 7	8 8	24 19	12 8	16 14	12 9	23 21	24 24	22 22	225 182	46·03
England and Wales	**(Mean of 47 Stations).....**	**24 19**	**15 11**	**21 15**	**16 9**	**12 8**	**18 14**	**10 7**	**16 13**	**9 6**	**22 18**	**21 16**	**20 14**	**204 151**	**40·72**

Table V.—*Number of "Rain-days" (·01 in. or more) and of "Wet-days" (·04 in. or more) in* 1928.—(*con.*).

County and River Division.	Station.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Year.	Total Rainfall.
															in.
ISLE OF MAN.															
Isle of Man..	Douglas (Borough Cemetery).	30 28	19 14	20 18	15 9	11 6	25 17	17 9	16 13	15 14	26 22	23 22	23 19	240 191	57·38
CHANNEL ISLANDS.															
Guernsey...	St. Peter Port (Grange Road)	25 21	15 13	20 13	16 11	14 11	10 6	6 4	11 5	5 5	23 22	24 20	25 19	194 150	45·05
SCOTLAND.															
Wigtown ..3	Stoneykirk (Ardwell House)..	28 26	17 12	21 15	13 11	10 5	20 19	14 7	18 14	17 13	26 21	25 21	25 16	234 180	50·39
Dumfries ..3	Dumfries (Crichton Inst.) ..	27 25	19 14	19 15	17 9	10 8	19 14	13 11	21 19	14 11	24 19	19 16	18 16	220 177	54·51
Selkirk.....2	Ettrick Manse	30 27	19 18	25 23	17 10	13 9	22 21	14 12	21 19	18 15	22 21	23 22	20 18	244 215	80·77
Berwick....4	Duns Castle	27 21	16 9	26 21	19 10	13 8	19 14	12 9	19 17	17 12	20 15	19 14	21 11	228 161	35·27
Linlithgow .2	Linlithgow Academy	30 25	22 17	23 17	14 9	12 9	22 17	15 8	22 19	16 12	21 16	21 16	22 14	240 179	46·14
Lanarkshire 5	Strathaven (Dungavel).....	30 29	17 17	21 17	15 10	7 6	24 20	22 17	20 19	16 14	26 23	20 16	21 18	239 206	68·27
Ayrshire ...6	Maybole (Culzean Castle)....	29 26	16 15	18 13	9 8	7 6	19 16	16 10	18 14	16 12	25 22	23 17	22 18	218 177	49·98
Renfrew ...3	Greenock (Prospect Hill)	30 30	20 20	26 17	17 12	9 6	25 19	21 16	21 16	16 14	25 23	23 19	21 19	254 211	84·95
Buteshire ..3	Dougarie Lodge	30 30	18 18	18 14	14 11	6 4	21 19	19 14	16 15	15 14	26 25	21 19	23 22	227 205	61·97
Argyllshire .6	Dalmally (Manse of Glenorchy)	30 30	20 20	16 12	17 15	10 8	25 20	26 22	20 19	14 13	22 19	22 21	24 22	246 221	100·58
Argyllshire 14	Islay (Eallabus)	31 29	20 19	19 18	14 13	5 4	24 21	30 23	21 18	17 15	27 23	26 24	24 23	258 230	72·06
Argyllshire 14	Mull (Gruline)	30 30	21 21	18 16	21 19	7 5	20 17	30 21	24 19	18 14	26 25	24 22	26 23	265 232	95·42
Argyllshire 14	Tiree (Cornaigmore Sch.)....	30 29	20 18	17 14	14 13	8 3	19 13	22 16	17 12	15 13	27 20	22 19	25 23	236 193	50·58
Fifeshire ...3	Leuchars (Seaplane Station).	26 22	14 9	24 16	13 8	11 8	21 16	12 6	21 14	15 11	20 16	21 14	17 12	215 152	31·43
Perthshire.11	Aberfeldy (Dall Avon)	30 25	19 15	26 18	16 8	12 8	18 14	13 9	20 18	18 8	22 17	26 19	21 16	241 175	52·71
Kincardine .3	Banchory (Invercannie)	28 20	7 3	27 16	14 7	16 10	17 10	13 10	22 18	20 16	24 17	23 15	20 12	231 154	32·54
Aberdeen ..1	Balmoral (Castle Gardens)...	25 22	18 10	31 19	19 12	16 12	20 15	13 9	20 16	16 15	23 15	28 19	21 13	250 177	40·97
Aberdeen ..4	Peterhead (Forehill Works)..	26 19	11 5	21 16	16 14	17 9	15 10	15 9	14 9	21 16	18 13	25 23	22 16	221 159	29·90
Morayshire .2	Gordon Castle	23 18	13 7	17 9	12 7	15 9	19 11	16 11	19 13	19 12	19 14	24 19	23 15	219 145	28·63
Inverness ..3	Cluny Castle.....	30 26	19 19	23 14	16 9	13 11	21 20	23 17	22 19	18 15	22 18	22 21	24 17	253 206	53·75
Inverness .17	Fort William	30 29	20 18	13 12	17 13	9 5	18 17	23 21	21 19	15 14	21 20	24 22	25 25	236 215	92·07

Table V.—*Number of "Rain-days" (·01 in. or more) and of "Wet-days" (·04 in. or more) in* 1928.—(*con.*).

County and River Division.	Station.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Year.	Total Rain-fall.
SCOTLAND —(*con.*).															in.
Inverness .18	Skye (Portree)	30 30	20 19	18 14	19 18	16 7	21 14	28 23	21 16	20 17	23 20	22 22	24 22	262 222	82·15
R'&Cromarty3	Fortrose	25 21	17 12	18 10	13 7	13 9	21 11	20 9	21 17	13 6	17 12	23 18	21 13	222 145	27·21
R'&Cromarty8	Loch Torridon (Bendamph)	29 29	20 19	17 16	19 19	17 16	19 19	23 22	19 19	13 13	20 19	22 22	22 22	240 235	93·82
R'&Cr'm'rty10	Stornoway	31 28	21 18	20 17	20 16	15 11	22 16	26 15	17 11	23 15	23 21	26 24	25 22	269 214	52·69
Sutherland .1	Lairg	27 26	17 16	15 8	12 7	13 10	19 13	24 18	20 17	19 12	19 17	25 19	17 16	227 179	41·28
Sutherland .5	Loch More (Achfary)	30 28	20 20	20 13	18 16	20 17	22 18	28 26	17 14	22 18	23 20	26 24	23 21	269 235	86·19
Caithness ..3	Thurso (Buckies)	27 20	20 15	20 10	15 14	16 13	20 14	26 20	19 16	20 16	19 14	26 22	27 25	255 199	39·74
Scotland	**(Mean of 28 Stations)**	**29 26**	**18 15**	**21 15**	**16 12**	**12 8**	**20 16**	**20 15**	**20 16**	**17 13**	**23 19**	**23 20**	**22 18**	**240 193**	**58·43**
IRELAND.															
Co. Cork ...6	Dunmanway (The Rectory)	31 28	22 17	24 22	16 13	10 9	20 16	14 9	22 20	13 9	25 25	21 20	24 20	242 208	75·98
Co. Cork ...7	Glanmire (Lota Lodge)	29 24	20 16	27 20	17 13	14 8	22 18	11 6	25 20	14 8	26 26	22 19	24 19	251 197	60·37
Co. Kerry ..3	Cahirciveen (Valentia Obsy.)	31 30	22 18	24 18	18 16	12 9	24 18	19 9	21 20	17 13	27 25	25 20	29 23	269 219	70·12
Co. Kerry ..3	Killarney (District Asylum)	31 31	19 15	23 21	19 13	13 8	21 14	13 7	27 21	15 10	28 24	26 21	26 20	261 205	60·82
Waterford..3	Waterford (Brook Lodge)	25 22	17 11	23 19	14 10	10 6	21 20	9 5	21 18	7 7	24 23	23 17	23 18	217 176	47·66
Tipperary ..1	Nenagh (Castle Lough)	31 29	20 16	23 20	19 15	10 7	23 17	14 10	23 20	12 8	26 25	25 19	23 18	249 204	50·78
Tipperary ..3	Cashel (Ballinamona)	30 25	18 15	22 18	16 11	10 8	24 15	14 6	24 18	10 6	26 24	24 18	25 17	243 181	42·94
Limerick...2	Foynes (Coolnanes)	31 29	18 15	24 19	17 13	11 7	21 17	16 9	20 16	13 10	26 24	24 21	23 21	244 201	50·09
Co. Wexford4	Gorey (Courtown House)	28 22	15 10	26 22	16 7	9 7	23 19	10 7	23 19	8 4	23 18	24 17	19 14	224 166	50·62
Queen's Co. 2	Abbey Leix (Blandsfort)	28 23	18 13	19 19	13 12	10 9	25 22	16 9	20 17	12 8	25 23	24 18	23 18	233 191	40·42
Co. Dublin .2	Dublin (Fitz William Square)	25 17	13 13	25 16	16 8	7 6	22 17	9 8	23 15	13 6	21 14	22 16	21 16	217 152	28·70
Co. Meath..4	Kells (Headfort)	29 27	18 14	22 18	15 11	9 6	21 17	14 12	20 16	15 11	26 23	25 21	25 19	239 195	46·52
Co.W'meath1	Moate (Coolatore)	29 24	18 14	25 15	17 13	10 8	25 18	18 13	24 18	15 11	25 22	26 17	26 16	258 189	39·20
Co.Longford2	Castle Forbes Gardens	29 28	17 14	22 17	16 10	10 8	22 20	15 12	22 17	14 11	23 22	24 19	22 15	236 193	46·45
Co. Galway.3	Ballynahinch Castle	30 28	21 19	20 18	16 10	10 9	24 23	23 17	24 24	18 14	27 27	23 22	27 24	263 235	81·48

Table V.—*Number of "Rain-days" (·01 in. or more) and of "Wet-days" (·04 in. or more) in* 1928.—(*con.*).

County and River Division.	Station.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Year.	Total Rainfall.
IRELAND —(*con.*).															in.
Co. Mayo ..4	Mallarany	31 30	21 20	20 18	18 12	12 10	22 21	22 18	23 20	16 13	26 25	20 19	26 21	257 227	78·70
Co. Sligo...2	Collooney (Markree Obsy.)...	30 29	18 16	21 18	19 16	12 8	24 21	19 11	22 19	16 12	25 25	24 21	23 20	253 216	54·87
Co. Cavan..1	Belturbet (Cloverhill)	30 27	19 15	21 15	16 11	9 6	22 19	18 9	23 15	15 11	26 20	26 18	22 13	247 179	39·94
Co. Down ..2	Seaforde	27 25	18 18	21 19	12 9	7 5	20 20	18 12	29 26	18 15	24 23	25 20	22 18	241 210	51·75
Co. Antrim.5	Ballymena (Harryville)	30 30	19 17	21 18	16 14	7 6	23 21	17 15	21 19	16 13	25 23	25 21	24 20	244 217	52·61
Co. Tyrone .3	Omagh (Edenfel)	30 29	18 17	21 16	20 10	9 7	24 20	21 11	22 19	15 12	27 21	21 18	24 20	252 200	54·55
Co. Donegal 3	Milford (The Manse).....	30 29	20 18	20 14	18 14	9 7	25 23	20 15	22 18	20 15	29 26	25 20	24 21	262 220	53·07
Co. Donegal 5	Killybegs (Rockmount)	31 30	20 17	19 14	16 14	12 8	25 20	24 19	23 21	17 14	27 24	24 22	26 21	264 224	71·00
Ireland	**(Mean of 23 Stations)**.....	**29 27**	**19 16**	**22 18**	**17 12**	**10 7**	**23 19**	**16 11**	**23 19**	**14 10**	**26 23**	**24 19**	**24 19**	**247 200**	**54·25**
British Isles.	**(Mean of 100 Stations) ....**	**27 23**	**17 13**	**21 16**	**16 11**	**11 8**	**20 16**	**14 10**	**19 15**	**12 9**	**23 19**	**23 18**	**22 17**	**225 175**	**49·00**

3. ABSOLUTE DROUGHTS, PARTIAL DROUGHTS AND DRY SPELLS IN 1928.

As in the analogous case of rain-days and wet-days, certain definitions have to be adopted in order to obtain a reliable body of statistical information on the subject of droughts. The definitions used are :—An **absolute drought** is a period of at least 15 consecutive days, to none of which is credited ·01 inch of rain or more. A **partial drought** is a period of at least 29 consecutive days, the mean daily rainfall of which does not exceed ·01 inch. A **dry spell** is a period of at least 15 consecutive days to none of which is credited ·04 inch of rain or more. These terms are used in *British Rainfall* only in the senses stated. More concise definitions of two of these terms would be :—

An *absolute drought* is a period of at least 15 days, none of which is a rain-day ; a *dry spell* is a period of at least 15 days, none of which is a wet-day.

In Table VIII are given particulars of the absolute droughts, partial droughts and dry spells, which occurred at the 100 selected stations of Table V. The names of the stations at which no instance of such droughts and dry spells occurred during the year are omitted from Table VIII. The number of stations so omitted this year is 21, of which 6 are in England and Wales, one in the Isle of Man, 12 in Scotland, and only 2 in Ireland.

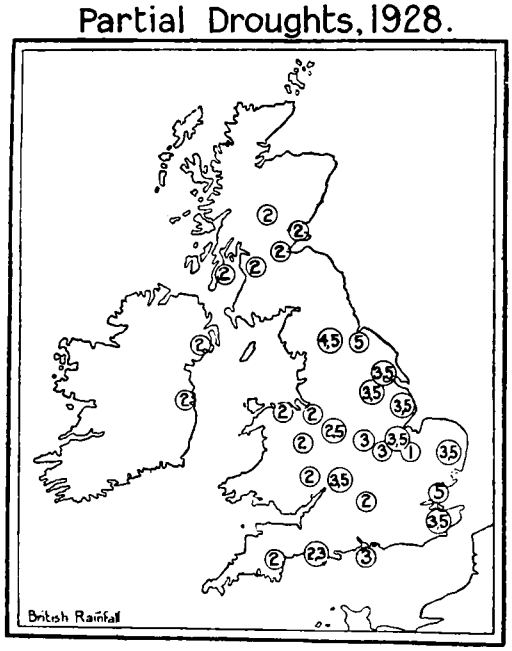
A noteworthy feature of the year was that the normally wet areas in the west and north-west of Ireland (excepting that around Cahirciveen, Co. Kerry) experienced one or more dry spells, and that some of those areas experienced even an absolute drought.

The total number of absolute droughts recorded in 1928 at the 100 stations was 50, being 9 fewer than the average value for 1887–1928. Partial droughts numbered 41, again 9 fewer than the average value, while dry spells numbered 115. This number is 8 fewer than the average for the 12 years 1917–1928. It can also be compared with values of 91 for 1927, 56 for 1920, and 201 for the dry year 1921. Further particulars will be found in Tables VI and VII.

The most widespread of the *absolute droughts* was that of July. This drought was noted at most of the stations in England, the exceptions being at places in some of the western and northern counties. The drought occurred also at Dublin and at Waterford, but it was not noted at any of the remaining representative stations in Ireland, nor at any of the representative stations in Scotland or Wales. In Ireland the most widespread drought lasted from the last week of April to the middle of May and was noted at 11 out of the 23 stations. This drought was noted also in Scotland in the wet districts of Inverness and Argyllshire. Curiously enough, no other absolute drought is recorded for

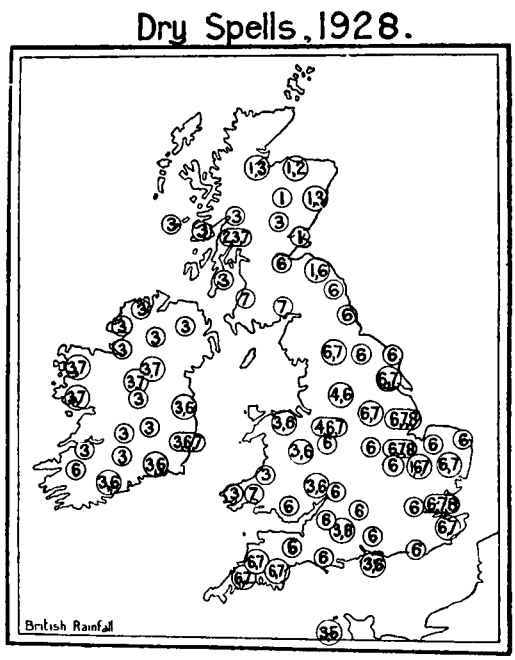
Scotland. At a few stations in England, an absolute drought occurred in September. At Cambridge, three absolute droughts were recorded in February, July and September.

The distribution of *partial droughts* is shown on an inset map, where figures 1 to 5 are used to indicate the incidence of the five periods of partial drought set out in Table VIII in accordance with the explanatory legend printed below the map. At a number of stations in England two separate partial droughts occurred during the year, but over the greater part of Ireland, Scotland and Wales no cases of partial drought were noted at the representative stations. The partial drought of April and May appeared in a belt from Fifeshire in East Scotland to Dublin, and in another belt from Cheshire to Dorset and Devon. The drought of June-July occurred in England to the east of the last-named belt, while the drought of September was found in the area adjoining the east coast of England. The longest partial droughts shown in Table VIII are of 43 days' duration; they occurred in Essex and Guernsey.



The numbers 1 to 5 indicate the incidence of partial droughts at different times of the year, as follows:—

1. February 15 to March 24.
2. Parts of April and May.
3. Parts of June and July.
4. July 5 to August 5.
5. September, with extensions into August or October.



The numbers 1 to 8 indicate the incidence of dry spells at different times of the year, as follows:—

1. End of February.
2. March.
3. April and May.
4. End of May.
5. End of June.
6. July.
7. September.
8. November and December.

The *dry spells* naturally include all the absolute droughts, but the period of a dry spell is often longer than that of an included absolute drought, while the list of dry spells contains periods which do not qualify as absolute droughts. The second inset map indicates the distribution of the eight dry spells which are set out in Table VIII, the figures 1 to 8 shown on the map referring to the periods of the year which are indicated in the legend printed below the map. No representative station experienced four dry spells, but seven stations experienced three dry spells each, with aggregate durations varying from 51 days at Dalmally (Argyllshire), to 61 days at Great Wakering (Essex). The dry spells of April-May, July and September were most widespread, the first principally in Ireland and Scotland, the second in England, and the third sporadically in various parts of the British Isles.

Table VI.—*Comparative Summary of Droughts*, 1917–1928.

Year.	ABSOLUTE DROUGHTS.* No. of Droughts at 100 Stations.	Mean Duration	Longest.	Stations without one.	PARTIAL DROUGHTS.† No. of Droughts at 100 Stations.	Mean Duration.	Longest.	Stations without one.
		Days.	Days.			Days.	Days.	
1917	109	19	28	23	64	33	61	46
1918	20	16	18	83	14	34	47	87
1919	33	18	31	68	44	38	50	63
1920	18	17	22	84	22	37	54	79
1921	86	19	38	47	109	42	89	30
1922	63	17	23	46	44	36	51	66
1923	11	17	24	89	20	38	54	80
1924	50	16	22	55	25	36	57	81
1925	74	23	33	37	76	38	60	29
1926	20	17	24	83	43	36	57	64
1927	11	17	19	90	19	32	43	83
1928	50	17	22	57	41	33	43	70
Average 1887–1928	59	18	26	54	50	36	56	60
1928 diff.from Average.	−9	−1	−4	+3	−9	−3	−13	+10

* 15 days without a "rain day." † 29 days averaging not more than ·01 in.

Table VII.—*Dry Spells*, 1917–1928 (*i.e.*, 15 days without a "wet day."‡)

Year.	Number at 100 Stations.	Mean Duration.	Longest Spell.	Number of Stations with None.	1 or 2.	3 or 4.	5 or more.
		Days.	Days.				
1917	193	20	31	5	70	25	0
1918	118	17	26	36	47	17	0
1919	98	19	38	35	62	3	0
1920	56	18	31	55	44	1	0
1921	201	21	58	21	43	29	7
1922	162	18	30	13	65	22	0
1923	65	18	29	54	43	3	0
1924	120	17	29	32	56	12	0
1925	164	22	43	14	65	21	0
1926	98	19	40	30	65	5	0
1927	91	17	31	43	49	8	0
1928	115	19	31	25	68	7	0
Average 1917–1928	123	19	35	30	56	13	1

‡ A day with ·04 in. or more.

County and River Division.	Station.	Absolute Droughts.*			Partial Droughts.†				Dry Spells.‡			
		Began.	Ended.	Lasted.	Began.	Ended.	Lasted.	Rain.	Began.	Ended.	Lasted.	Rain.
ENGLAND AND WALES				days			days	in.			days	in.
London ...2	St. Pancras (Camden Square)..	July 9	July 25	17	..	..	..	..	July 6	July 25	20	·03
Kent 2	Lympne Aerodrome	July 9	July 25	17	June 19	July 26	38	·35	July 4	July 26	23	·04
		..	..	..	Aug. 21	Sept. 27	38	·37	Aug. 28	Sept. 27	31	·13
Sussex 3	Patcham (Brighton W.W.) ...	July 9	July 26	18	..	..	..	..	July 9	July 26	18	·00
Hampshire 1	Ventnor (Roy. Nat. Hospital).	April 28	May 13	16	..	..	..	..	April 28	May 13	16	·00
		July 9	July 25	17	June 19	July 26	38	·35	July 4	July 26	23	·08
,, 7	Selborne (The Wakes)	July 9	July 25	17	..	..	..	..	July 9	July 25	17	·00
Berkshire 5	Upton (Manor House).....	..	..	..	April 12	May 16	35	·27	..	..	..	..
		July 9	July 25	17	..	..	..	..	July 4	July 25	22	·04
Northamp- 4 tonshire.	Wellingborough (Swanspool)..	..	..	..	June 27	July 25	29	·25	July 4	July 25	22	·05
,, 4	Eye (Northolm)	July 9	July 25	17	June 27	July 26	30	·26	July 5	July 25	21	·04
		..	..	..	Sept. 10	Oct. 8	29	·25	Sept. 10	Sept. 27	18	·05
		..	..	..	..	..	..	..	Nov. 25	Dec. 10	16	·06
Cambridge 2	Cambridge (Botanic Gardens)..	Feb. 15	Feb. 29	15	Feb. 15	Mar. 24	39	·35	Feb. 15	Feb. 29	15	·00
		July 9	July 25	17	..	..	..	..	July 4	July 25	22	·05
		Sept. 10	Sept. 24	15	..	..	..	..	Sept. 10	Sept. 24	15	·00
Essex.....3	Great Wakering	July 9	July 25	17	..	..	..	..	July 9	July 25	17	·00
		Sept. 1	Sept. 22	22	Aug. 27	Oct. 8	43	·34	Aug. 27	Sept. 23	28	·06
		..	..	..	..	..	..	..	Nov. 25	Dec. 10	16	·08
Suffolk 2	Haughley (Haughley House)..	July 9	July 23	15	June 27	July 25	29	·26	July 4	July 25	22	·04
		..	..	..	Aug. 29	Oct. 9	42	·42	Sept. 10	Sept. 27	18	·04
Norfolk ...1	Gorleston	July 9	July 25	17	..	..	..	..	July 4	July 26	23	·06
,, ...4	Sporle	July 9	July 25	17	..	..	..	..	July 6	July 25	20	·02
Wiltshire...3	Larkhill (School of Artillery)..	..	..	..	..	..	..	..	April 28	May 12	15	·03
		July 9	July 25	17	..	..	..	..	July 4	July 25	22	·06
Dorsetshire..3	Dorchester (Wollaston House)	..	..	..	April 16	May 16	31	·28	..	..	..	..
		July 8	July 25	18	June 27	July 26	30	·27	July 4	July 26	23	·04
S. Devon...2	Launceston (Polapit Tamar)..	..	..	..	..	..	..	..	July 6	July 22	17	·02
		..	..	..	..	..	..	..	Sept. 9	Sept. 23	15	·02
,, ...4	Holne (Church Park Cottage)..	..	..	..	April 16	May 15	30	·21	..	..	..	..
		July 6	July 25	20	..	..	..	..	July 6	July 25	20	·00
		..	..	..	..	..	..	..	Sept. 10	Sept. 26	17	·01

* At least 15 days, none credited with ·01 in. or more. † At least 29 days, with an average not exceeding ·01 in.
‡ At least 15 days, none credited with ·04 in. or more.

TABLE VIII.—*Droughts and Dry Spells in* 1928—(*con.*).

County and River Division.	Station.	Absolute Droughts.*			Partial Droughts.†				Dry Spells.‡			
		Began.	Ended.	Lasted.	Began.	Ended.	Lasted.	Rain.	Began.	Ended.	Lasted.	Rain.
				days			days	in.			days	in.
Cornwall ..2	St. Austell (Trevarna)	July 9	July 25	17	..	..	..	..	July 9	July 25	17	·00
		Sept. 9	Sept. 23	15	..	..	..	..	Sept. 9	Sept. 23	15	·00
Somerset-shire. 1	Bath (Henrietta Park)	..	..	..	..	..	..	..	July 9	July 25	17	·02
,, 3	Angersleigh (Leigh Court)	..	..	..	..	..	..	..	July 6	July 25	20	·02
Gloucester-shire. 4	Mickleton (Bank House)	July 7	July 26	20	June 27	July 26	30	·29	June 30	July 26	27	·10
		..	..	..	Aug. 28	Sept. 27	31	·31	..	..	..	..
Hereford-shire. 1	Ross (Birchlea)	..	..	..	April 14	May 15	32	·30	April 14	May 2	19	·09
		July 6	July 25	20	..	..	..	..	July 6	July 25	20	·00
Shropshire .3	Bishops Castle (Castle Street) .	..	..	..	April 13	May 14	32	·19	April 22	May 14	23	·02
		July 9	July 26	18	..	..	..	..	July 6	July 28	23	·03
,, .4	Shifnal (Hatton Grange)	..	..	..	..	..	..	..	July 8	July 29	22	·06
Stafford-shire. 5	Ashbourne (Mayfield House)..	..	..	..	April 12	May 14	33	·33	May 20	June 4	16	·07
		..	..	..	..	..	..	..	July 6	July 23	18	·06
		Sept. 9	Sept. 23	15	Sept. 6	Oct. 4	29	·22	Sept. 9	Sept. 26	18	·03
Leicester-shire. 4	Leicester (Stoughton Drive) ..	July 6	July 25	20	June 30	July 29	30	·27	July 5	July 25	21	·02
Lincolnshire 3	Horncastle	July 9	July 25	17	June 30	July 29	30	·26	July 6	July 29	24	·03
		..	..	..	Aug. 30	Oct. 8	40	·38	Sept. 10	Sept. 24	15	·04
		..	..	..	..	..	..	..	Nov. 26	Dec. 10	15	·07
Notting-hamshire. 5	Worksop (Hodsock Priory) ...	July 9	July 27	19	June 30	July 30	31	·29	June 30	July 29	30	·10
		..	..	..	Aug. 28	Oct. 4	38	·36	Sept. 6	Oct. 4	29	·09
Cheshire ...2	Northwich (Hunts Lock)	..	..	..	April 12	May 15	34	·29	..	..	..	..
Yorkshire W.R. 8	Meltham (Harewood Lodge) ..	..	..	..	..	..	..	..	May 23	June 6	15	·10
		..	..	..	..	..	..	..	July 6	July 27	22	·09
,, 3 E.R.	Hull (Pearson Park)	..	..	..	June 30	July 29	30	·27	July 5	July 28	24	·12
		..	..	..	Aug. 28	Oct. 6	40	·36	Sept. 6	Sept. 21	16	·05
,, 4 E.R.	Filey Vicarage	..	..	..	..	..	..	..	July 9	July 25	17	·03
,, 1 N.R.	West Witton (Ivy House)	..	..	..	July 5	Aug. 5	32	·29	July 6	July 25	20	·02
		..	..	..	Sept. 1	Oct. 3	33	·31	Sept. 11	Oct. 3	23	·11
,, 2 N.R.	Felixkirk (Mount St. John)....	July 11	July 25	15	..	..	..	..	July 5	July 25	21	·05
		..	..	..	Sept. 6	Oct. 4	29	·27	..	..	..	..
Durham 2	Sunderland (W Hendon House)	July 6	July 25	20	..	..	..	..	July 5	July 25	21	·01

TABLE VIII.—*Droughts and Dry Spells in* 1928—(*con.*).

County and River Division.	Station.	Absolute Droughts.*			Partial Droughts.†				Dry Spells.‡			
		Began.	Ended.	Lasted.	Began.	Ended.	Lasted.	Rain.	Began.	Ended,	Lasted.	Rain.
				days			days	in.			days	in.
Northum- 6 berland.	Ilderton (Lilburn Tower)	July 7	July 25	19	..	..	..	..	July 7	July 25	19	·00
Glamorgan 6	Treherbert (Tyn-y-waun)	..	..	..	..	..	..	..	July 9	July 24	16	·05
Carmarthen 2	Carmarthen (The Friary).....	Sept. 9	Sept. 23	15	..	..	..	..	Sept. 9	Sept. 23	15	·00
Pembroke- 4 shire.	Haverfordwest (Portfield)	..	..	..	..	..	..	..	April 23	May 14	22	·09
Cardigan 3	Lampeter (Falcondale)	April 24	May 13	20	..	..	..	..	April 24	May 13	20	·00
Denbigh ...2	Denbigh (Garn)	April 26	May 13	18	April 13	May 15	33	·23	April 19	May 14	26	·05
		..	..	..	..	..	..	..	July 5	July 22	18	·05
CHANNEL ISLANDS.												
Guernsey ...	St. Peter Port (Grange Road)..	..	..	..	June 14	July 26	43	·22	June 14	July 2	19	·07
		July 9	July 26	18	..	..	..	..	July 6	July 26	21	·02
		..	..	..	Aug. 27	Sept. 26	31	·22	..	..	..	..
SCOTLAND.												
Dumfries ..3	Dumfries (Crichton Roy. Inst.)	..	..	..	..	..	..	..	Sept. 19	Oct. 4	16	·05
Berwick- 4 shire.	Duns Castle	..	..	..	..	..	..	..	Feb. 14	Feb. 28	15	·03
		..	..	..	..	..	..	..	July 11	July 25	15	·03
Linlithgow 2	Linlithgow Academy	..	..	..	April 12	May 11	30	·29	..	..	..	..
		..	..	..	..	..	..	..	July 11	July 25	15	·09
Lanarkshire.5	Strathaven (Dungavel)	..	..	..	April 11	May 17	37	·34	..	..	..	..
Ayrshire ...6	Maybole (Culzean Castle Gardens)	..	..	..	..	..	..	..	Sept. 21	Oct. 5	15	·08
Buteshire ..3	Dougarie Lodge	..	..	..	April 14	May 18	35	·32	April 26	May 18	23	·04
Argyllshire 6	Dalmally (Manse of Glenorchy)	..	..	..	..	..	..	..	Mar. 1	Mar. 15	15	·10
		..	..	..	..	..	..	..	April 26	May 16	21	·07
		..	..	..	..	..	..	..	Sept. 20	Oct. 4	15	·06
,, 14	Mull (Gruline)	April 28	May 13	16	..	..	..	..	April 28	May 14	17	·01
,, 14	Tiree (Cornaigmore School) ..	..	..	..	..	..	..	..	April 28	May 15	18	·06

* At least 15 days, none credited with ·01 in. or more. † At least 29 days, with an average not exceeding ·01 in.
‡ At least 15 days, none credited with ·04 in. or more.

TABLE VIII.—*Droughts and Dry Spells in* 1928—(*con.*).

County and River Division.	Station.	Absolute Droughts.*			Partial Droughts.†				Dry Spells.‡			
		Began.	Ended.	Lasted.	Began.	Ended.	Lasted.	Rain.	Began.	Ended.	Lasted.	Rain.
				days			days	in.			days	in.
Fifeshire ...3	Leuchars (Seaplane Station) ..	..	..	..	..	..	..	..	Feb. 14	Feb. 28	15	·04
		..	..	..	April 13	May 15	33	·30	..	..	..	..
Perth 11	Aberfeldy (Dall Avon)	..	..	..	April 14	May 15	32	·30	April 14	May 2	19	·09
Kincardine 3	Banchory (Invercannie).....	..	..	..	..	..	..	..	Feb. 12	Feb. 29	18	·07
		..	..	..	..	..	..	..	April 21	May 9	19	·04
Aberdeen ..1	Balmoral Castle Gardens	..	..	..	..	..	..	..	Feb. 14	Feb. 29	16	·12
Moray 2	Gordon Castle	..	..	..	..	..	..	..	Feb. 17	Mar. 4	17	·07
		..	..	..	..	..	..	..	Mar. 10	Mar. 25	16	·09
Inverness .17	Fort William	April 27	May 12	16	..	..	..	..	April 27	May 16	20	·02
Ross and...2	Fortrose	..	..	..	..	..	..	..	Feb. 18	Mar. 4	16	·08
Cromarty.		..	..	..	..	..	..	..	April 27	May 13	17	·11
IRELAND.												
Co. Cork ...7	Glanmire (Lota Lodge)	..	..	..	..	..	..	..	April 27	May 16	20	·08
		..	..	..	..	..	..	..	July 5	July 25	21	·06
Co. Kerry .3	Killarney (District Asylum) ..	..	..	..	..	..	..	..	July 13	July 27	15	·05
Co. Water 3	Waterford (Brook Lodge)	April 27	May 13	17	..	..	..	..	April 27	May 15	19	·02
ford		July 11	July 25	15	..	..	..	..	July 4	July 27	24	·10
Co. Tipperary 1	Nenagh (Castle Lough)	..	..	..	..	..	..	..	April 28	May 16	19	·04
,, 3	Cashel (Ballinamona)	April 27	May 15	19	..	..	..	..	April 27	May 15	19	·00
Co. Limerick 2	Foynes (Coolnanes)	..	..	..	..	..	..	..	April 28	May 16	19	·02
Co. Wexford 4	Gorey (Courtown House)	April 27	May 15	19	..	..	..	..	April 25	May 16	22	·06
		..	..	..	..	..	..	..	July 5	July 21	17	·04
		..	..	..	..	..	..	..	Sept. 8	Sept. 23	16	·04

* At least 15 days, none credited with ·01 in. or more. † At least 29 days, with an average not exceeding ·01 in.
‡ At least 15 days, none credited with ·04 in. or more.

TABLE VIII.—*Droughts and Dry Spells in* 1928—(*con.*).

County and River Division.	Station.	Absolute Droughts.*			Partial Droughts.†				Dry Spells.‡			
		Began.	Ended.	Lasted.	Began.	Ended.	Lasted.	Rain.	Began.	Ended.	Lasted.	Rain.
				days			days	in.			days	in.
Queen's 2	Abbey Leix (Blandsfort)	April 27	May 14	18	..	..	..	..	April 27	May 15	19	·02
County	Dublin (Fitzwilliam Square) ..	April 27	May 14	18	April 17	May 16	30	·28	April 27	May 15	19	·01
		July 5	July 21	17	..	..	..	..	July 5	July 21	17	·00
Co. West- 1 meath.	Moate (Coolatore)	April 28	May 14	17	..	..	..	..	April 27	May 15	19	·02
Co. Long- 2 ford.	Castle Forbes Gardens	April 28	May 15	18	..	..	..	..	April 27	May 15	19	·04
		..	..	..	..	..	..	..	Sept. 18	Oct. 3	16	·04
Co. Galway 3	Ballynahinch Castle.....	April 26	May 15	20	..	..	..	..	April 24	May 15	22	·01
		..	..	..	..	..	..	..	Sept. 19	Oct. 3	15	·02
Co. Mayo ..4	Mallarany	..	..	..	..	..	..	..	April 26	May 15	20	·03
		..	..	..	..	..	..	..	Sept. 18	Oct. 3	16	·04
Co. Sligo ..2	Collooney (Markee Obsy)	..	..	..	..	..	..	..	April 28	May 15	18	·04
Co. Cavan .1	Belturbet (Cloverhill)	..	..	..	..	..	..	..	April 27	May 15	19	·04
		..	..	..	..	..	..	..	Sept. 18	Oct. 3	16	·07
Co. Down ..2	Seaforde	..	..	..	April 23	May 26	34	·30	..	..	..	..
Co. Antrim 5	Ballymena (Harryville)	April 28	May 14	17	..	..	..	..	April 28	May 15	18	·03
Co. Tyrone 3	Omagh (Edenfel)	April 28	May 12	15	..	..	..	..	April 28	May 14	17	·02
Co. Donegal 3	Milford (The Manse)	April 28	May 14	17	..	..	..	..	April 28	May 14	17	·00
,, 5	Killybegs (Rockmount)	..	..	..	..	..	..	..	April 26	May 15	20	·04

* At least 15 days, none credited with ·01 in. or more. † At least 29 days, with an average not exceeding ·01 in.
‡ At least 15 days, none credited with ·04 in. or more.

4. RAIN SPELLS AND WET SPELLS IN 1928.

The definitions of the terms " rain spell " and " wet spell " as used in this section, are analogous to those of the terms " absolute drought " and " dry spell," which are used in the previous section. Thus :—

A **Rain Spell** is a period of at least 15 consecutive days to each of which is credited ·01 inch of rain or more.

A **Wet Spell** is a period of at least 15 consecutive days to each of which is credited ·04 inch of rain or more.

In other words, a *rain spell* contains at least 15 consecutive rain-days, and a *wet spell* contains at least 15 consecutive wet-days.

Table XI contains particulars of all rain spells* and wet spells during 1928 which were reported from the 100 selected stations of Table V. Stations from which no rain or wet spells were reported are omitted from this table. The number of stations so omitted is 28. Tables IX and X give comparative statistics concerning the rain spells since 1903 and the wet spells since 1917 respectively.

In 1928, as in 1927, the total number of rain spells at the 100 stations exceeded 200, being 202. Rain spells in excess of 200 are on record in this section of *British Rainfall* for only 6 of the 26 years for which the data are available, viz., for the years 1928, 1927, 1923, 1916, 1910 and 1903. But the most remarkable feature of Table XI is the

* The precise procedure adopted in the allocation of rain spells or wet spells which cover parts of two years is set out in the footnote on p. 25 *British Rainfall*, 1926.

extraordinarily large number of wet spells which occurred during the year. The number is 87, which is far in excess of the previous "record" since 1917, namely, 65 in 1922. The very wet year of 1924 actually provided the lowest number of wet spells since 1917, viz., 30, while the average number for the whole 12 years is 55, as set out in Table X. That table suggests that the number of rain and wet spells experienced in any year is practically independent of the total amount of rainfall for the year. It indicates that no fewer than 17 out of the 100 stations had 3 or 4 wet spells during the year 1928 : the average number being only 7. At a number of stations in Scotland and Ireland there was a wet spell corresponding with every rain spell.

No rain or wet spells occurred over a large area of the Midlands, and of the east and south-east of England ; and also along parts of the east coasts of Scotland and Ireland. Elsewhere they were generally experienced and their incidence was particularly frequent at the stations in Scotland and Ireland.

Eight rain spells are shown in Table XI, each with a duration of 50 days or more, and of these five are reported from Ireland. The longest rain spell was one of 52 days at Dunmanway, Co. Cork. This spell lasted from 29th December, 1927 to February 18th, 1928, and yielded 16·85 in. of rain. The most notable spell shown in the Table, however, is one of 50 days' duration (January 1st to February 19th) at Grasmere, Westmorland, during which period no less than 36·51 in. of rain was measured, an amount exceeding the average annual rainfall of England and Wales by about 1¼ in. Another rain spell of 18 days' duration at Grasmere, which occurred in November, contributed 21·51 in. to the year's total at that station. Most of the rain spells occurred in the early and late months of the year, but in parts of Wales, Scotland and Ireland, there was a summer rain spell in June or July which lasted over 40 days in Argyllshire.

The wet spells occurred, with only one or two exceptions, exclusively in the early or late months of the year. Locally in Scotland, the summer rain spell of June-July found its counterpart in a corresponding wet spell.

Table IX.—*Comparative Table of Rain Spells* at 100 Stations, 1903-1928.*

Year.	No. of Rain Spells.	DURATION OF SPELLS. Mean. Days.	Mean. Mean rain per day.	Greatest. Days.	Greatest. Mean rain per day.	STATIONS WITH None.	1 or 2.	3 or 4.	5 or more
			in.		in.				
1903	282	22	·28	52	·51	11	41	26	22
1904	152	19	·22	34	·27	31	51	11	7
1905	121	19	·24	44	·38	45	39	12	4
1906	125	21	·25	50	·40	38	47	11	4
1907	177	21	·25	45	·17	38	30	18	14
1908	159	19	·24	49	·43	21	59	12	8
1909	110	19	·26	45	·12	36	52	12	0
1910	235	21	·25	64	·30	24	34	25	17
1911	185	22	·29	39	·15	19	50	23	8
1912	198	22	·27	58	·19	29	32	30	9
1913	128	21	·29	64	·19	44	34	19	3
1914	150	22	·29	70	·28	30	44	25	1
1915	132	20	·27	38	·25	34	47	16	3
1916	231	20	·29	62	·28	19	41	28	12
1917	152	22	·28	52	·19	30	48	17	5
1918	186	23	·30	56	·21	21	51	19	9
1919	143	20	·26	46	·31	29	53	14	4
1920	165	20	·25	45	·24	32	45	12	11
1921	184	22	·29	45	·25	31	36	25	8
1922	170	21	·26	49	·35	30	42	23	5
1923	222	23	·26	89	·31	17	47	21	15
1924	168	19	·25	54	·23	33	41	18	8
1925	176	19	·29	60	·34	27	43	23	7
1926	194	20	·28	45	·14	21	37	38	4
1927	206	19	·26	42	·19	21	43	26	10
1928	202	24	·27	52	·27	28	43	21	8
Average	175	24	·27	52	·27	28	43	21	8

NOTE.—The values previous to 1910 have been increased to the equivalent of 100 Stations for comparison. In the columns headed "Greatest" the figures refer to the selected Stations only.

* At least ·01 in. each day, 15 days or more.

Table X.—*Wet Spells (at least ·04 in. each day, 15 days or more); 100 Stations;* 1917-1928.

Year.	Number of Wet Spells.	Mean Duration. Days.	Mean Duration. Mean rain per day.	Longest Spell. Days.	Longest Spell. Mean rain per day.	STATIONS WITH None.	1 or 2.	3 or 4.	5 or more
			in.		in.				
1917	55	19	·35	31	·46	67	28	3	2
1918	49	21	·40	36	·44	70	26	4	0
1919	49	17	·29	33	·34	66	29	5	0
1920	47	18	·37	31	·61	75	17	8	0
1921	59	20	·41	29	·32	69	22	9	0
1922	65	20	·36	42	·28	64	29	7	0
1923	62	20	·36	42	·39	73	17	8	2
1924	30	18	·34	24	·37	79	19	2	0
1925	55	17	·42	31	·18	67	27	6	0
1926	60	19	·37	30	·48	62	32	6	0
1927	39	18	·35	24	·29	74	22	4	0
1928	87	20	·40	39	·29	62	21	17	0
Average 1917–1928	55	19	·37	33	·37	69	24	7	0

Table XI.—*Rain Spells and Wet Spells in* 1928.

County and River Division.	Station.	Rain Spells.*				Wet Spells.†				Max. in a Day during Rain Spells.	
		Began.	Ended.	Lasted.	Total Rain.	Began.	Ended.	Lasted.	Total Rain.	Date.	Rain.
ENGLAND AND WALES				days	in.			days	in.		in.
Dorsetshire 3	Dorchester (Wollaston House)	Mar. 16	Mar. 31	16	3·32	..	..	..	..	{Mar.20 / Mar.29}	·60 / ·70
South Devon 2	Launceston (Polapit Tamar)..	Nov. 10	Nov. 30	21	5·25	Nov. 10	Nov. 26	17	5·14	Nov. 16	·70
North Devon 2	Barnstaple (N. Dev. Athenæum)	Jan. 3	Feb. 8	37	7·09	Jan. 17	Feb. 4	19	5·37	Jan. 21	·94
		Nov. 9	Nov. 30	22	4·04	..	..	..	..	Nov. 16	·80
Cornwall .. 2	St. Austell (Trevarna)	Jan. 9	Feb. 16	39	10·11	Jan. 23	Feb. 16	25	6·65	Feb. 12	1·48
		Oct. 7	Oct. 26	20	5·80	..	..	..	..	Oct. 19	·90
		Nov. 14	Nov. 29	16	3·95	..	..	..	..	Nov. 16	·55
Somerset .. 3	Angersleigh (Leigh Court)	Nov. 10	Nov. 27	18	4·04	..	..	..	..	Nov. 21	·66
Shropshire .3	Bishops Castle (Castle Street)	Nov. 10	Nov. 29	20	4·22	Nov. 10	Nov. 24	15	3·91	Nov. 22	·60
,, .4	Shifnal (Hatton Grange)	Jan. 23	Feb. 8	17	2·03	..	..	..	..	Jan. 23	·35
Staffordshire 5	Ashbourne (Mayfield House)..	Nov. 10	Nov. 27	18	6·34	..	..	..	..	Nov. 25	·94
Leicestershire 4	Leicester (Stoughton Drive) ..	Oct. 14	Oct. 30	17	2·52	..	..	..	..	Oct. 27	·54
Nottinghamshire 5	Worksop (Hodsock Priory) ...	Nov. 10	Nov. 25	16	2·38	..	..	..	..	Nov. 16	·69
Cheshire ... 2	Northwich (Hunts Lock)	Nov. 18	Dec. 2	15	2·29	..	..	..	..	Nov. 19	·55
North Lancashire. 5	Blackpool (Met. Observatory).	Nov. 18	Dec. 2	15	2·76	..	..	..	..	Nov. 22	·43
Yorkshire 8 W.R.	Meltham (Harewood Lodge) ..	Oct. 18	Nov. 2	16	2·53	..	..	..	..	Oct. 26	·69
		Nov. 9	Nov. 26	18	7·61	Nov. 10	Nov. 26	17	7·60	Nov. 24	·93
,, 1 N.R.	West Witton (Ivy House)	Feb. 4	Feb. 18	15	2·92	..	..	..	..	Feb. 10	·72
		Nov. 10	Nov. 25	16	4·06	..	..	..	..	Nov. 23	·85
Northumberland 6	Ilderton (Lilburn Tower)	Mar. 4	Mar. 20	17	2·32	..	..	..	..	Mar. 5	·34

* At least 15 days, each credited with ·01 in. or more. † At least 15 days, each credited with ·04 in. or more.

Table XI.—*Rain Spells and Wet Spells in* 1928.

County and River Division.	Station.	Rain Spells.*				Wet Spells.†				Max. in a Day during Rain Spells.	
		Began.	Ended.	Lasted.	Total Rain.	Began.	Ended.	Lasted.	Total Rain.	Date.	Rain.
ENGLAND AND WALES (*con.*)				days	in.			days	in.		in.
Cumberland 1	Geltsdale	Jan. 1	Jan. 16	16	3·47	..	..	..	..	Jan. 5	·60
		Oct. 14	Nov. 3	21	3·48	..	..	..	..	Oct. 24	·58
		Nov. 9	Nov. 26	18	4·93	..	..	..	..	Nov. 16	·70
Westmorland 2	Grasmere (The Wray)	Jan. 1	Feb. 19	50	36·51	Jan. 17	Feb. 18	33	21·73	Jan. 12	2·86
		Mar. 15	Mar. 30	16	7·78	..	..	..	..	Mar. 29	2·20
		Oct. 14	Nov. 2	20	12·66	..	..	..	..	Oct. 23	1·74
		Nov. 9	Nov. 26	18	21·51	Nov. 9	Nov. 26	18	21·51	Nov. 14	3·00
Glamorgan 6	Treherbert (Tyn-y-waun)	30.xii.27	Jan. 15	17	11·07	..	..	..	..	Jan. 12	2·44
		Jan. 23	Feb. 17	26	20·60	..	..	..	..	Feb. 15	3·02
		Nov. 10	Nov. 29	20	17·89	..	..	..	..	Nov. 12	2·58
Carmarthen 2	Carmarthen (The Friary)	Dec. 15	Dec. 30	16	5·64	..	..	..	..	Dec. 25	1·16
Pembrokeshire 4	Haverfordwest (Portfield)	Jan. 17	Jan. 31	15	5·57	Jan. 17	Jan. 31	15	5·57	Jan. 23	1·07
Cardigan 3	Lampeter (Falcondale)	31.xii.27	Feb. 5	37	11·58	..	..	..	..	Jan. 23	1·21
Denbighshire 2	Denbigh (Garn)	June 12	June 26	15	2·11	..	..	..	..	June 13	·71
		Nov. 18	Dec. 2	15	3·28	..	..	..	..	Nov. 24	·49
		Dec. 15	Dec. 29	15	1·84	..	..	..	..	Dec. 24	·30
Merioneth 4	Dolgelly (Bryntirion)	Nov. 9	Dec. 2	24	10·38	..	..	..	..	Nov. 11	1·85
Anglesey 1	Llanerchymedd (Llwydiarth Esgob)	Jan. 17	Jan. 31	15	3·89	..	..	..	..	Jan. 18	·56
										Jan. 23	
		Feb. 2	Feb. 16	15	3·45	..	..	..	..	Feb. 10	·84
		June 17	July 1	15	2·72	..	..	..	..	June 28	·75
		Nov. 18	Dec. 2	15	3·02	Nov. 18	Dec. 2	15	3·02	Nov. 22	·75

* At least 15 days, each credited with ·01 in. or more. † At least 15 days, each credited with ·04 in. or more.

Table XI.—*Rain Spells and Wet Spells in* 1928—(*con.*).

County and River Division.	Station.	Rain Spells.*				Wet Spells.†				Max. in a Day during Rain Spells.	
		Began.	Ended.	Lasted.	Total Rain.	Began.	Ended.	Lasted.	Total Rain.	Date.	Rain.
				days	in.			days	in.		in.
ISLE OF MAN	Douglas (Borough Cemetery) .	Jan. 4	Feb. 16	44	10·77	..	..	..	..	Jan. 18	1·39
		June 17	July 1	15	3·58	..	..	..	..	July 1	·74
CHANNEL ISLANDS											
Guernsey ..	St. Peter Port (Grange Road).	Nov. 10	Nov. 27	18	3·85	..	..	..	..	Nov. 14	·81
SCOTLAND											
Wigtown ..3	Stoneykirk (Ardwell House) ..	Jan. 17	Feb. 4	19	4·79	..	..	..	..	Jan. 18	1·07
		Oct. 14	Nov. 1	19	5·66	..	..	..	..	Oct. 19	·95
		Nov. 14	Nov. 30	17	5·15	Nov. 14	Nov. 30	17	5·15	Nov. 23	·77
Dumfries...3	Dumfries (Crichton Inst.)	Jan. 31	Feb. 18	19	3·97	..	..	..	..	Feb. 10	·68
		Nov. 9	Nov. 26	18	4·75	..	..	..	..	Nov. 22	·54
Selkirk 2	Ettrick Manse	Jan. 3	Feb. 18	47	21·12	..	..	..	..	Jan. 21	1·50
Berwick ...4	Duns Castle	Mar. 4	Mar. 20	17	2·22	..	..	..	..	Mar. 5	·59
Linlithgow .2	Linlithgow Academy	Jan. 3	Feb. 18	47	13·09	..	..	..	..	Feb. 6	·94
Lanarkshire 5	Strathaven (Dungavel).....	Jan. 3	Feb. 2	31	15·75	Jan. 3	Jan. 26	24	13·55	Jan. 14	1·28
		Feb. 4	Feb. 18	15	5·39	Feb. 4	Feb. 18	15	5·39	Feb. 4	1·24
		June 21	July 6	16	5·01	June 21	July 6	16	5·01	June 28	·87
		Oct. 14	Oct. 31	18	6·73	..	..	..	..	Oct. 18	} ·81
										Oct. 29	
Ayrshire ...6	Maybole (Culzean Castle Gardens)	Jan. 1	Jan. 15	15	4·02	..	..	..	..	Jan. 7	·68
		Oct. 14	Oct. 30	17	5·81	..	..	..	..	Oct. 18	·94
		Nov. 9	Nov. 30	22	5·95	..	..	..	..	Nov. 23	·83
Renfrew ...3	Greenock (Prospect Hill)	30.xii.27	Jan. 15	17	8·81	Jan. 1	Jan. 15	15	8·67	Jan. 11	1·34
		Jan. 17	Feb. 18	33	12·99	Jan. 17	Feb. 18	33	12·99	Jan. 18	1·18
		Mar. 15	April 4	21	6·78	..	..	..	..	Mar. 19	·99
		June 6	July 5	30	8·03	..	..	..	..	June 9	1·35
		Oct. 14	Oct. 30	17	8·84	..	..	..	..	Oct. 19	1·58
		Nov. 9	Nov. 26	18	9·74	Nov. 9	Nov. 26	18	9·74	Nov. 23	1·61
Buteshire ..3	Dougarie Lodge	Jan. 1	Jan. 15	15	5·98	Jan. 1	Jan. 15	15	5·98	Jan. 11	·86
		Jan. 17	Feb. 6	21	6·52	Jan. 17	Feb. 6	21	6·52	Jan. 23	1·06
		June 20	July 5	16	3·72	..	..	..	..	June 21	·58
		Oct. 14	Oct. 31	18	5·74	Oct. 14	Oct. 31	18	5·74	Oct. 29	·75
		Nov. 14	Nov. 29	16	6·26	Nov. 14	Nov. 28	15	6·25	Nov. 23	1·13

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Table XI.—*Rain Spells and Wet Spells in* 1928—(*con.*).

County and River Division.	Station.	Rain Spells.* Began.	Ended.	Lasted.	Total Rain.	Wet Spells.† Began.	Ended.	Lasted.	Total Rain.	Max. in a Day during Rain Spells. Date.	Rain.
SCOTLAND (*con.*).				days	in.			days	in.		in.
Argyllshire .6	Dalmally (Manse of Glenorchy)	Jan. 1	Jan. 15	15	10·76	Jan. 1	Jan. 15	15	10·76	Jan. 5	1·48
		Jan. 17	Feb. 18	33	18·22	Jan. 17	Feb. 18	33	18·22	Jan. 20	1·17
		June 6	July 18	43	13·10	..	..	..	..	June 6	1·24
		Oct. 13	Oct. 30	18	10·73	..	..	..	..	Oct. 29	1·64
		Nov. 9	Nov. 30	22	11·24	Nov. 9	Nov. 26	18	10·89	Nov. 23	1·69
,, 14	Islay (Eallabus)	30.xii.27	Feb. 17	50	15·29	30.xii.27	Jan. 15	17	6·20	Jan. 23	·98
		..	..	..	..	Jan. 29	Feb. 17	20	5·49	..	..
		June 13	July 30	48	6·83	..	..	..	..	July 1	·53
		Oct. 14	Oct. 30	17	8·14	Oct. 14	Oct. 30	17	8·14	Oct. 19	1·49
		Nov. 9	Dec 11	33	11·45	Nov. 9	Nov. 30	22	9·09	Nov. 23	1·29
,, 14	Mull (Gruline)	30.xii.27	Jan 15	17	8·49	Jan. 1	Jan. 15	15	8·47	Jan. 11	1·72
		Jan. 17	Feb 19	34	13·11	Jan. 17	Feb. 19	34	13·11	Jan. 31	1·27
		June 20	July 30	41	8·80	..	..	..	..	July 13	·82
		Oct. 14	Oct. 30	17	10·49	Oct. 14	Oct. 30	17	10·49	Oct. 19	1·59
		Nov. 8	Dec. 11	34	14·78	Nov. 9	Nov. 30	22	10·66	Dec. 9	1·78
		Dec. 15	Dec. 29	15	6·91	..	..	..	..	Dec. 25	1·74
,, 14	Tiree (Cornaigmore School) ..	30.xii.27	Jan. 15	17	4·85	31.xii.27	Jan. 15	16	4·81	Jan. 14	·88
		Jan. 17	Feb. 18	33	6·54	Jan. 31	Feb. 17	18	3·65	Jan. 23	·68
		Oct. 14	Oct. 31	18	5·89	..	..	..	..	Oct. 19	·93
		Nov. 9	Dec. 11	33	7·94	Nov. 9	Nov. 26	18	6·17	Nov. 23	1·18
Perthshire .11	Aberfeldy (Dall Avon)	Jan. 3	Feb. 1	30	9·73	..	..	..	..	Jan. 9	1·25
		Mar. 10	Mar. 31	22	7·57	..	..	..	..	Mar. 20	2·66
		Nov. 9	Nov. 29	21	3·92	..	..	..	..	Nov. 23	·71
Aberdeen 1	Balmoral Castle Gardens	Feb. 28	April 5	38	6·33	..	..	..	..	Mar. 20	1·27
		Oct. 22	Nov. 7	17	2·41	..	..	..	..	Oct. 31	·61
		Nov. 9	Nov. 29	21	2·54	..	..	..	..	Nov. 23	·81

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† At least 15 days, each credited with ·04 in. or more.

Table XI.—*Rain Spells and Wet Spells in* 1928—(*con.*).

County and River Division.	Station.	Rain Spells.* Began.	Ended.	Lasted.	Total Rain.	Wet Spells.† Began.	Ended.	Lasted.	Total Rain.	Max. in a Day during Rain Spells. Date.	Rain.
SCOTLAND (*con.*).				days	in.			days	in.		in.
Inverness ..3	Cluny Castle.....	Jan. 1	Jan. 16	16	5·97	Jan. 1	Jan. 16	16	5·97	Jan. 12	·93
		Jan. 18	Feb. 18	32	9·66	Jan. 31	Feb. 18	19	6·57	Feb. 6	1·13
		Nov. 9	Nov. 27	19	6·49	Nov. 9	Nov. 27	19	6·49	Nov. 17	·97
,, 17	Fort William	Jan. 1	Jan. 16	16	9·38	Jan. 1	Jan. 15	15	9·36	Jan. 12	1·35
		Jan. 18	Feb. 19	33	17·67	Jan. 18	Feb. 1	15	7·65	Feb. 8	2·20
		..	..	..	..	Feb. 3	Feb. 18	16	10·00	..	..
		Nov. 9	Nov. 30	22	11·29	Nov. 9	Nov. 30	22	11·29	Nov. 12	1·67
										Nov. 19	
										Jan. 3	
,, 18	Skye (Portree)	Jan. 1	Jan. 15	15	7·29	Jan. 1	Jan. 15	15	7·29	Jan. 5	·83
										Jan. 9	
		Jan. 17	Feb. 18	33	11·79	Jan. 17	Feb. 16	31	11·33	Jan. 20	·89
										June 22	
		June 21	July 14	24	7·69	..	..	..	..	June 29	·68
										July 10	
		Oct. 14	Oct. 31	18	9·77	..	..	..	..	Oct. 18	1·32
		Nov. 9	Nov. 30	22	9·35	Nov. 9	Nov. 30	22	9·35	Nov. 19	·85
Ross and Cromarty 3	Fortrose	Jan. 3	Jan. 18	16	3·07	..	..	..	..	Jan. 4	·70
		Nov. 14	Nov. 28	15	2·04	..	..	..	..	Nov. 23	·45
,, 8	Loch Torridon (Bendamph) ..	Jan. 1	Jan. 15	15	9·69	Jan. 1	Jan. 15	15	9·69	Jan. 9	1·29
		Jan. 19	Feb. 19	32	16·93	Jan. 19	Feb. 18	31	16·90	Feb. 8	1·91
		June 20	July 14	25	8·25	June 20	July 6	17	5·57	July 2	·81
		Nov. 9	Nov. 30	22	11·68	Nov. 9	Nov. 30	22	11·68	Nov. 14	1·05
,, 10	Stornoway	31.xii.27	Feb. 19	51	16·01	Jan. 29	Feb. 18	21	6·12	Jan. 10	1·10
		Mar. 27	April 10	15	2·60	..	..	..	..	April 9	·38
		June 26	July 10	15	2·80	..	..	..	..	June 30	·37
		Nov. 9	Nov. 30	22	6·43	Nov. 9	Nov. 27	19	6·24	Nov. 16	·71
		Dec. 15	Dec. 30	16	2·98	..	..	..	..	Dec. 23	·44
Sutherland 1	Lairg	June 24	July 17	24	3·12	..	..	..	..	July 17	·54
		Aug. 23	Sept. 6	15	1·45	..	..	..	..	Aug. 25	·25
		Nov. 10	Nov. 30	21	4·15	Nov. 10	Nov. 26	17	4·00	Nov. 17	·48
,, 5	Loch More (Achfary)	Jan. 1	Jan. 28	28	13·00	Jan. 1	Jan. 16	16	8·88	Jan. 5	1·72
		Jan. 30	Feb. 19	21	10·06	Jan. 30	Feb. 19	21	10·06	Feb. 10	1·61
		June 14	July 2	19	4·60	..	..	..	..	June 16	·76
		July 16	July 31	16	5·09	..	..	..	..	July 17	1·17
		Nov. 9	Nov. 30	22	12·70	Nov. 9	Nov. 30	22	12·70	Nov. 29	1·37

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† At least 15 days, each credited with ·04 in. or more.

Table XI.—*Rain Spells and Wet Spells in* 1928—(*con.*).

County and River Division.	Station.	Rain Spells.* Began.	Ended.	Lasted.	Total Rain.	Wet Spells.† Begun.	Ended.	Lasted.	Total Rain.	Max. in a day during Rain Spells. Date.	Rain.
SCOTLAND (*con.*).				days	in.			days	in.		in.
Caithness ..3	Thurso (Buckies)	Jan. 3	Jan. 20	18	3·08	..	..	..	..	Jan. 4	·47
		Feb. 1	Feb. 19	19	3·10	..	..	..	..	Feb. 6	·58
		Nov. 16	Dec. 12	27	6·68	..	..	..	..	Nov. 24	·81
IRELAND.											
Co. Cork ...6	Dunmanway (The Rectory) ..	29.xii.27	Feb. 18	52	16·85	Jan. 5	Jan. 28	24	8·21	Feb. 15	1·67
		Mar. 13	Mar. 31	19	5·76	..	..	..	..	Mar. 18	·96
		Nov. 9	Nov. 24	16	7·22	Nov. 9	Nov. 24	16	7·22	Nov. 22	1·37
,, 7	Glanmire (Lota Lodge)	Jan. 5	Jan. 28	24	4·60	Jan. 11	Jan. 28	18	4·37	Jan. 20	·49
		Mar. 12	Mar. 31	20	6·27	..	..	..	..	Mar. 14	1·35
		Oct. 4	Oct. 26	23	7·35	Oct. 4	Oct. 26	23	7·35	Oct. 11	·92
		Nov. 9	Nov. 24	16	4·77	..	..	..	..	Nov. 14	1·08
Co. Kerry .3	Cahirciveen (Valentia Obsy.) .	30.xii.27	Feb. 18	51	12·65	Jan. 5	Feb. 5	32	8·53	Feb. 12	·96
		Oct. 4	Oct. 26	23	8·18	..	..	..	..	Oct. 10	1·09
		Nov. 9	Dec. 11	33	9·23	Nov. 9	Nov. 24	16	6·86	Nov. 21	·95
		Dec. 13	Dec. 30	18	5·00	..	..	..	..	Dec. 15	1·03
,, 3	Killarney (District Asylum) ..	29.xii.27	Feb. 17	51	14·44	29.xii.27	Feb. 5	39	11·28	Jan. 20	1·71
		Mar. 13	Mar. 31	19	4·43	..	..	..	..	Mar. 18	·82
		Aug. 5	Aug. 30	26	4·57	..	..	..	..	Aug. 6	1·15
		Oct. 3	Oct. 31	29	7·78	..	..	..	..	Oct. 19	·81
		Nov. 9	Nov. 29	21	6·40	Nov. 9	Nov. 27	19	6·36	Nov. 18	1·33
Waterford..3	Waterford (Brook Lodge)	Mar. 10	Mar. 30	21	4·74	..	..	..	..	Mar. 14	·70
		Oct. 6	Oct. 20	15	5·35	Oct. 6	Oct. 20	15	5·35	Oct. 7	·95
										Oct. 10	
Tipperary .1	Nenagh (Castle Lough)	29.xii.27	Feb. 17	51	11·66	Jan. 17	Feb. 5	20	5·18	Feb. 14	·70
										Feb. 15	
		Mar. 14	Mar. 31	18	3·79	..	..	..	..	Mar. 17	·64
		Nov. 14	Nov. 30	17	4·69	..	..	..	..	Nov. 22	·82
,, 3	Cashel (Ballinamona)	30.xii.27	Jan. 15	17	1·69	..	..	..	..	Jan. 1	·33
		Jan. 17	Feb. 5	20	3·95	..	..	..	..	Jan. 25	·54
		June 8	July 1	24	3·65	..	..	..	..	June 12	·84
		Oct. 4	Oct. 26	23	5·12	..	..	..	..	Oct. 13	·70
		Nov. 9	Nov. 26	18	3·46	..	..	..	..	Nov. 15	·48

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† At least 15 days, each credited with ·04 in. or more.

Table XI.—*Rain Spells and Wet Spells in* 1928—(*con.*).

County and River Division.	Station.	Rain Spells.* Began.	Ended.	Lasted.	Total Rain.	Wet Spells.† Began.	Ended.	Lasted.	Total Rain.	Max. in a Day during Rain Spells. Date.	Rain.
IRELAND (*con.*).				days	in.			days	in.		in.
Limerick ..2	Foynes (Coolnanes).....	29.xii.27	Feb. 6	40	7·91	Jan. 17	Feb. 5	20	5·30	Jan. 25	·56
		Oct. 13	Oct. 30	18	5·07	..	..	..	..	Oct. 13	·83
		Nov. 9	Dec. 2	24	5·82	Nov. 9	Nov. 26	18	5·59	Nov. 22	·91
Co. Wexford4	Gorey (Courtown House)	Jan. 17	Feb. 4	19	3·46	..	..	..	..	Jan. 18	·37
		Mar. 14	Mar. 30	17	7·12	..	..	..	..	Mar. 16	1·33
Queen's 2 County	Abbey Leix (Blandsfort)	Jan. 17	Feb. 5	20	3·91	..	..	..	..	Jan. 25	·54
		June 17	July 1	15	2·14	..	..	..	..	June 24	·35
		Nov. 14	Nov. 28	15	3·30	..	..	..	..	Nov. 22	·58
Co. Meath..4	Kells (Headfort)	Jan. 17	Feb. 12	27	4·92	..	..	..	..	Feb. 10	·64
		June 17	July 1	15	3·68	..	..	..	..	June 18	·84
		Oct. 11	Oct. 26	16	2·92	..	..	..	..	Oct. 18	·44
		Nov. 13	Nov. 29	17	4·06	..	..	..	..	Nov. 23	·65
Co. West- 1 Meath	Moate (Coolatore)	Jan. 17	Feb. 10	25	3·98	Jan. 20	Feb. 4	16	3·16	Jan. 31	·39
		Mar. 14	Mar. 31	18	2·59	..	..	..	..	Mar. 17	·73
		June 23	July 7	15	2·30	..	..	..	..	July 4	·61
		Nov. 9	Nov. 30	22	3·68	..	..	..	..	Nov. 22	·58
		Dec. 15	Dec. 29	15	2·35	..	..	..	..	Dec. 15	1·08
Co. Long- 2 ford	Castle Forbes Gardens	29.xii.27	Jan. 15	18	2·96	..	..	..	..	Jan. 1	·46
		Nov. 9	Nov. 30	22	5·49	..	..	..	..	Nov. 21	·54
Co. Galway.3	Ballynahinch Castle	30.xii.27	Jan. 15	17	5·28	30.xii.27	Jan. 15	17	5·28	Jan. 1	·98
		Jan. 17	Feb. 18	33	9·86	Jan. 22	Feb. 17	27	8·46	Jan. 27	·83
		Mar. 14	Mar. 31	18	4·31	..	..	..	..	Mar. 29	·69
		June 20	July 15	26	7·11	..	..	..	..	July 4	·97
		Oct. 13	Oct. 31	19	8·46	Oct. 13	Oct. 31	19	8·46	Oct. 30	·90
		Nov. 9	Dec. 9	31	12·32	Nov. 9	Dec. 9	31	12·32	Nov. 20	1·36
Co. Mayo .4	Mallarany	30.xii.27	Feb. 18	51	18·79	30.xii.27	Jan. 15	17	6·13	Jan. 25	·98
		..	..	..	..	Jan. 17	Feb. 17	32	12·62	..	..
		Mar. 14	Mar. 31	18	3·16	..	..	..	..	Mar. 28	·49
		June 20	July 5	16	4·37	..	..	..	..	June 20	·76
		Nov. 9	Nov. 28	20	8·47	Nov. 9	Nov. 24	16	7·92	Nov. 21	1·26
		Dec. 13	Dec. 29	17	5·40	..	..	..	..	Dec. 15	1·07

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† At least 15 days, each credited with ·04 in. or more.

Table XI.—*Rain Spells and Wet Spells in* 1928—(*con.*).

County and River Division.	Station.	Rain Spells.*				Wet Spells.†				Max. in a Day during Rain Spells.	
		Began.	Ended.	Lasted.	Total Rain.	Began.	Ended.	Lasted.	Total Rain.	Date.	Rain.
IRELAND (*con.*).				days	in.			days	in.		in.
Co. Sligo ..2	Collooney (Markree Obsy.)....	29.xii.27	Jan. 15	18	4·14	Jan. 1	Jan. 15	15	3·99	Jan. 5	·53
		Jan. 17	Feb. 5	20	5·06	Jan. 19	Feb. 5	18	4·78	Jan. 25	·76
		Nov. 9	Nov. 30	22	5·47	Nov. 13	Nov. 29	17	4·65	Nov. 23	·61
Co. Cavan..1	Belturbet (Cloverhill)	Jan. 1	Jan. 28	28	4·19	..	..	..	..	Jan. 25	·47
		June 17	July 5	19	3·36	..	..	..	..	July 4	·45
		Nov. 9	Nov. 27	19	4·29	..	..	..	..	Nov. 23	·40
Co. Down ..2	Seaforde	Aug. 3	Sept. 8	37	5·44	..	..	..	..	Aug. 19	·68
Co. Antrim 5	Ballymena (Harryville)	30.xii.27	Jan. 15	17	4·30	30.xii.27	Jan. 15	17	4·30	Jan. 13	·67
		Jan. 17	Feb. 6	21	4·64	Jan. 17	Feb. 5	20	4·61	Jan. 31	·61
		Nov. 14	Nov. 30	17	4·13	Nov. 14	Nov. 28	15	4·08	Nov. 23	·50
Co. Tyrone 3	Omagh (Edenfel).....	Jan. 1	Jan. 28	28	6·92	Jan. 1	Jan. 15	15	4·64	Jan. 5	·65
Co. Donegal 3	Milford (The Manse)	Jan. 1	Jan. 15	15	4·90	Jan. 1	Jan. 15	15	4·90	Jan. 7	·71
		Jan. 17	Feb. 5	20	4·75	Jan. 20	Feb. 5	17	4·45	Jan. 24	·60
		Oct. 13	Oct. 31	19	4·57	Oct. 13	Oct. 31	19	4·57	Oct. 19	·68
		Nov. 9	Nov. 30	22	5·10	Nov. 13	Nov. 27	15	4·39	Nov. 18	·62
,, 5	Killybegs (Rockmount)	29.xii.27	Feb. 6	40	15·67	Jan. 1	Jan. 15	15	8·93	Jan. 5	1·80
		..	..	..	..	Jan. 17	Feb. 5	20	6·43	..	..
		Nov. 9	Nov. 30	22	7·03	..	..	..	..	Nov. 24	1·00
		Dec. 14	Dec. 30	17	6·01	..	..	..	..	Dec. 23	1·35

* At least 15 days, each credited with ·01 in. or more.

† At least 15 days, each credited with ·04 in. or more.

5. DURATION OF RAINFALL IN 1928.

The duration of rainfall discussed in this section is defined as the length of time during which rain is falling at a rate not less than 0·1 mm. per hour, *i.e.*, ·004 in. per hour. The tabulations at all the official stations are made according to this convention.

The duration of rainfall is obtained from measurements of the records of autographic gauges. On these records the amount of rain is measured vertically and the duration of the rainfall is measured horizontally in accordance with scales which are printed upon the charts before they are placed in position in the gauges. The pen of an autographic gauge writes a horizontal line on the record during such time as no rain is falling, and it writes a more or less sloping line whenever rain is passing into the receiver of the gauge.

Torrential rain appears on the record as a nearly vertical line, and there is every gradation of slope from that extreme down to the case when rain is falling so slowly that the slope of the record cannot certainly be distinguished from the horizontal, in consequence of the uncertainties due to printing of the record, and to the difficulty of setting the chart quite accurately upon the instrument. Below this limit there are still further occasions when it is difficult even for an observer to decide whether it is really raining or not, since a wet fog may pass by slow degrees into a very light drizzle. Such occasions usually pass quite unrecorded by the ordinary autographic gauge.

Occasions of very light rain are, therefore, difficult to deal with when considering duration of rainfall; we may have 24 hours of light precipitation and remain in doubt, from an examination of the record or even from actual experience of the weather, whether to enter the duration as 24 hours or nil. The lower limit of 0·1 mm. per hour, or ·004 in. per hour, was accordingly adopted tentatively some years ago in order that falls of no appreciable importance should be omitted, as well as those of which the record gave no certain evidence.

The list of stations reporting duration of rainfall for 1928 is practically the same as that for last year. The distribution of the stations in operation at the beginning of 1927 was shown by a map in *British Rainfall*, 1926, p. 36. Central Ireland and northern Scotland are still but sparsely represented, while records of duration from some of the very wet stations in central and northern Wales and the English Lake District would also be particularly valuable. Additional records are included from Leafield (Oxford), Upper Heyford (Oxford), Cardington (Bedford), Porton (Wiltshire), and Nelson (Lancashire). It is possible to include records from Bidston Observatory, near Liverpool, and Swinton House (Berwickshire), which had temporarily dropped out of the table.

Table XII sets out the duration of rainfall expressed in hours at 56 stations in the British Isles, for each month and for the whole year of 1928. In this table the durations at Kew Observatory, Eskdalemuir Observatory, Aberdeen Observatory and Valentia Observatory are expressed for monthly periods commencing both at midnight and at 7 a.m. The station with the highest aggregate duration for the year is Glenedra Lodge (Londonderry) with a duration of 1,661 hours. This period is equivalent to about 69 days, or more than one-sixth of the total duration possible. Other stations with high aggregates were Blackwater Dam, in Glenleven (Argyllshire) with 1,635 hours, Cray Reservoir (Brecon) with 1,614 hours, and Eskdalemuir (Dumfriesshire) with 1,503 hours. The lowest aggregate for the year was reported from Nottingham, where the value was 383 hours, a period equivalent to 16 days, or only one-twenty-third of the total duration possible. Other relatively low values are reported from the east and south-east of England.

The monthly extremes shown in the table are 254 hours at Cray Reservoir, in January, and only 4 hours at Hodsock Priory, Worksop, in September.

In London, the days on which the duration of rainfall was greatest were 28th January and 26th October, on both of which occasions the fall lasted for aggregate periods of 10·7 hours in the 24 hours beginning 9 a.m. There appears to be only one example, among the stations given in the Tables, of rainfall lasting for a complete 24-hour period commencing at the morning hour of observation. That example was at Lower Laithe Reservoir (Yorks) on 20th August. Daily durations of 22 hours or more were reported also from Cray Reservoir, Eskdalemuir Observatory, Blackwater Dam, Glenedra Lodge. At Stoner Hill Petersfield (Hampshire), daily durations exceeding 21 hours occurred on two occasions.

Table XIII sets out the mean monthly and annual values of rate of rainfall at each of the stations of Table XII. The values are obtained

by dividing the total fall for the month or year by the duration as given in the preceding Table. Stations with high mean rates of rainfall for the year are Earby (Yorkshire), with ·079 in. per hour ; Eastbourne (Sussex), with ·076 in. per hour ; and Blackwater Dam (Argyllshire), with ·074 in. per hour. The stations with the lowest mean rates of fall were Aldergrove and Armagh in Northern Ireland, with ·037 and ·039 in. per hour, respectively, and Sealand (Flint), with ·038 in. per hour. Much higher and lower mean rates of fall have been computed for individual months of the year, however. Thus, mean monthly rates in excess of ·120 in. per hour are shown for Eastbourne (Sussex) in August and October, and for Leafield (Oxfordshire) in August ; while mean rates of ·023 in. per hour are given for Upper Heyford (Oxfordshire) and Cardington (Bedford) in March. The Table clearly shows the seasonal variation in the mean rate of rainfall, the maximum occurring in the summer or autumn and the minimum in winter or spring.

Table XII.—*Duration of Rainfall at 56 Stations in the British Isles during* 1928.

For the purposes of this table the month commences either at 7 a.m. or 9 a.m. G.M.T. on the first day of the month and ends at the same hour on the first day of the following month.

County and River Division.	Station.	Pattern of Gauge.	Height above Sea.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
			ft.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.
London 2	St. Pancras (Camden Square)	Hyet.	111	81	26	35	31	32	35	27	38	10	56	28	59	458
Surrey 4	Croydon Aerodrome	Hyet.	245	110	26	48	50	26	34	28	28	13	70	61	80	574
„ 5	Kingston Sewage Works.....	Casella	25	64	29	33	20	42	40	29	29	14	59	45	50	454
„ 5	Richmond (Kew Obsy.)	Beckley	18	79	25	39	30	26	28	25	32	12	52	36	59	443
† „ 5	„ „	„	„	79	23	41	30	26	28	24	34	12	51	36	59	443
Kent 1	Dover (Waterloo Crescent)	Hyet.	22	103	25	50	47	41	25	13	15	15	77	92	80	583
„ 2	Lympne Aerodrome	Hyet.	348	124	35	53	59	62	39	15	23	9	93	110	92	714
Sussex 5	Eastbourne (Wilmington Sq.)	Hyet.	59	87	31	37	45	28	24	13	8	7	63	65	48	454
„ 5	Hellingly (Burlow).....	Hyet.	209	105	29	42	63	38	35	24	20	7	99	92	77	631
Hampshire .4	Calshot (Seaplane Station)...	Hyet.	8	114	41	54	40	23	44	33	24	17	109	58	83	640
„ ...5	Winchester (Worthy Down)	Hyet.	273	127	56	77	47	26	35	31	27	19	94	67	79	685
„ ...6	Petersfield (Stoner Hill).....	Hyet.	749	144	70	84	44	34	41	32	30	19	101	96	89	784
„ ...8	South Farnborough (R.A.E.)	Hyet.	230	111	36	79	55	26	39	27	29	19	67	60	70	618
Middlesex ...2	Palmers Grn.(Broomfield Pk.)	Casella	138	91	33	33	30	37	34	29	34	11	55	37	57	481
Herts 2	Harpenden (Rothamsted) ...	Hyet.	420	101	40	51	19	27	26	36	27	10	51	54	53	495
Oxon. 2	Leafield (Wireless Station)	Hyet.	612	102	38	42	13	9	27	34	15	17	71	70	85	523
„ 3	Upper Heyford	Hyet.	408	...	...	76	33	20	41	37	29	17	72	81	89	...
Bedford ...3	Cardington	Hyet.	137	80	20	35	21	28	38	49	26	15	42	39	64	457
Suffolk 2	Ipswich (Rookwood,Copdock)	Casella	164	74	24	60	30	27	25	32	24	9	39	47	100	491
„ 3	Felixstowe Aerodrome	Hyet.	15	68	16	38	32	35	32	27	27	13	37	52	105	482
Wilts 3	Porton	Hyet.	364	88	27	46	35	28	39	23	21	25	68	50	65	515
S. Devon 2	Plymouth (Freedom Park)...	Hyet.	208	127	76	106	34	24	37	33	24	21	85	94	80	741
Cornwall 2	Falmouth Observatory	Beckley	167	126	92	127	51	33	50	46	27	33	130	125	110	950
Stafford 3	West Bromwich	Hyet.	543	69	50	53	23	5	39	16	22	12	72	52	60	473
„ 5	Ashbourne (Mayfield House)	Casella	374	139	86	79	32	27	87	50	55	18	100	119	89	881
Lincoln 3	Cranwell Aerodrome	Hyet.	237	75	26	48	15	38	37	24	35	24	72	46	46	486
Nottingham 2	Sutton Bonington (Agri. Coll.)	Hyet.	159	74	49	39	12	28	45	22	39	19	72	57	36	492
„ 5	Nottingham (Trent Lane) ...	Halliwell	83	73	35	37	7	16	33	18	25	7	55	36	41	383
„ 5	Worksop (Hodsock Priory)...	Halliwell	56	84	43	40	19	29	53	13	33	4	77	39	46	480
Cheshire ...3	Birkenhead (Bidston Obs.)	Self-Syphon	189	86	50	40	30	28	87	37	44	31	64	53	57	605

† Values are for periods ending 24h. on last day of month.

Table XII.—*Duration of Rainfall at* 56 *Stations in the British Isles during* 1928—(*con.*).

County and River Division.	Station.	Pattern of Gauge.	Height above Sea.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
			ft.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.
S. Lancs.....3	Bolton (Queen's Park)	Fernley	342	146	86	65	31	29	99	47	68	22	70	96	84	843
C. Lancs. ...1	Nelson (Walton Lane) ...	Hyet.	540	153	100	63	24	34	121	39	76	28	93	109	77	917
,, ...2	Leyland (Worden Hall)	Fernley	125	132	66	64	30	21	107	45	66	33	81	96	61	802
,, ...3	Southport (Hesketh Park) ...	Fernley	39	113	53	50	30	21	93	44	55	29	79	84	54	705
N. Lancs.....4	Lancaster (Greg Observatory)	Beckley	312	151	70	71	39	25	106	59	75	40	102	104	73	915
W.R. Yorks.7	Rotherham (Aldwarke Sewage Works)	Hyet.	71	93	43	45	24	37	49	13	35	11	76	86	47	559
,, 9	Haworth (Lower Laithe Res.)	Hyet.	772	173	107	64	27	34	118	31	86	17	122	146	113	1038
,, 9	Earby (Sewage Works) ...	Hyet.	426	113	71	43	12	14	82	26	63	13	79	81	38	635
,, 9	Skipton (Town Hall)	Hyet.	368	135	62	65	19	25	111	31	69	21	93	101	59	791
N.R. Yorks.2	Felixkirk (Mount St. John)	Halliwell	542	84	35	69	32	42	78	22	57	13	70	39	52	593
Glamorgan .3	Swansea (Victoria Park)	Hyet.	28	142	102	88	22	14	72	51	50	31	125	96	99	892
Brecon 7	Cray Reservoir	Halliwell	1044	254	189	188	63	12	159	69	108	53	156	205	156	1614
Flint.....1	Sealand Aerodrome	Hyet.	17	98	64	76	37	36	91	35	48	43	70	66	63	727
Anglesey	Holyhead (Salt Island)	Hyet.	26	107	64	91	29	25	88	37	57	31	91	85	81	786
Dumfries ...5	Eskdalemuir Observatory*...	Beckley	794	204	133	152	44	48	142	112	121	87	193	148	119	1503
† ,, ...5	,, ,, ...	,,	,,	202	131	156	44	48	142	112	121	87	191	150	119	1503
Berwick ...3	Swinton House	Hyet.	200	57	29	63	22	27	77	23	51	20	49	67	45	530
Renfrew.....2	Renfrew Aerodrome	Hyet.	3	180	96	126	41	48	112	63	73	66	158	95	96	1154
,, ...3	Greenock (Prospect Hill)	Hyet.	200	202	121	129	61	40	125	84	71	84	149	119	133	1318
Argyll 4	Glenleven (Blackwater Dam)	Hyet.	1072	240	143	141	80	22	125	131	114	106	169	197	167	1635
Fife 3	Leuchars	Hyet.	40	91	38	86	20	34	93	15	67	56	84	61	61	706
Aberdeen ...2	Aberdeen (King's College) ...	Beckley	48	82	15	84	55	50	66	51	48	61	57	80	58	707
† ,, ...2	,, ,, ...	,,	,,	82	15	84	55	50	66	51	48	61	57	80	58	707
Shetland 3	Lerwick Observatory	Dines	269	99	76	80	35	27	48	45	32	54	72	110	106	784
Cork 7	Cork (University College) ...	Hyet.	66	91	69	137	78	37	96	24	72	33	93	78	103	911
Kerry 3	Valentia Observatory	Beckley	42	131	86	101	87	43	100	53	80	68	122	99	102	1072
† ,, ...3	,, ,, ...	,,	,,	131	86	102	86	43	98	55	80	68	122	99	102	1072
Armagh.....5	Armagh Observatory	Beckley	209	133	113	105	53	25	90	49	75	47	101	111	102	1004
Antrim 5	Aldergrove Aerodrome.....	Hyet.	239	141	111	109	51	36	100	59	76	69	124	116	112	1104
Londonderry5	Glenedra Lodge	Hyet.	950	222	185	153	93	50	128	55	158	113	164	187	153	1661

† Values are for periods ending 24h. on last day of month.

Table XIII.—*Mean Rate of Rainfall per hour during* 1928.

County and River Division.	Station.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
		ins. per hr.	ins. per hr.	ins. per hr.	ins. per hr.	ins. per hr.	ins. per hr.	ins. per hr.	ins. per hr.	ins. per hr.	ins. per hr.	ins. per hr.	ins. per hr.	ins. per hr.
London 2	St. Pancras (Camden Square)	·044	·064	·040	·043	·057	·073	·077	·069	·068	·061	·078	·045	·057
Surrey 4	Croydon Aerodrome	·033	·062	·049	·038	·083	·077	·068	·103	·058	·071	·037	035	·052
,, ...5	Kingston Sewage Works	·054	·054	·050	·068	·061	·064	·085	·082	·063	·060	·034	·043	·058
,, ...5	Richmond (Kew Observatory)	·039	·060	·043	·046	·067	·080	·085	·078	·084	·070	·051	·040	·057
† ,, ...5	,, ,, ,, ...	·039	·062	·042	·046	·067	·080	·087	·076	·084	·070	·051	·040	·057
Kent 1	Dover (Waterloo Crescent)	·037	·052	·050	·065	·054	·076	·078	·093	·077	·071	·074	·054	·060
,, ...2	Lympne Aerodrome	·035	·035	·028	·039	·042	·057	·072	·061	·035	·076	·043	·029	·044
Sussex 5	Eastbourne (Wilmington Sq.)	·063	·062	·065	·046	·056	·105	·106	·132	·077	·125	·073	·065	·076
,, ...5	Hellingly (Burlow)	·040	·054	·049	·037	·043	·096	·068	·081	·056	·080	·058	·047	·059
Hampshire 4	Calshot (Seaplane Station)	·045	·043	·038	·043	·067	·044	·053	·063	·069	·051	·039	·030	·045
,, ...5	Winchester (Worthy Down).....	·047	·039	·039	·039	·059	·079	·039	·075	·071	·063	·043	·039	·049
,, ...6	Petersfield (Stoner Hill)	·054	·046	·040	·047	·067	·086	·054	·113	·062	·087	·046	·047	·059
,, ...8	South Farnborough (R.A.E.)	·032	·055	·030	·043	·062	·059	·064	·063	·068	·071	·033	·032	·045
Middlesex 2	Palmers Green (Broomfield Pk.).....	·044	·054	·050	·036	·061	·082	·069	·066	·061	·078	·066	·041	·057
Herts 2	Harpenden (Rothamsted)	·037	·049	·044	·042	·051	·081	·068	·076	·070	·071	·056	·047	·054
Oxon. 2	Leafield (Wireless Station).....	·041	·060	·054	·066	·094	·096	·090	·129	·046	·063	·047	·028	·055
,, ...3	Upper Heyford.....	...	...	·023	·030	·028	·048	·066	·064	·046	·051	·039	·026	...
Bedford.....3	Cardington	·034	·055	·023	·053	·050	·048	·047	·064	·046	·054	·043	·034	·043
Suffolk 2	Ipswich (Rookwood, Copdock)	·048	·049	·041	·050	·055	·077	·071	·102	·058	·056	·046	·040	·052
,, ...3	Felixstowe Aerodrome	·060	·055	·050	·035	·039	·069	·056	·065	·049	·050	·035	·032	·044
Wilts 3	Porton	·051	·063	·049	·052	·066	·071	·070	·074	·080	·077	·055	·039	·059
S. Devon.....2	Plymouth (Freedom Park)	·062	·051	·048	·046	·062	·068	·044	·095	·101	·075	·052	·056	·059
Cornwall 2	Falmouth Observatory.....	·069	·051	·049	·049	·049	·039	·038	·050	·058	·057	·037	·061	·052
Stafford.....3	West Bromwich.....	·044	·047	·046	·048	·076	·082	·078	·116	·062	·069	·081	·034	·060
,, ...5	Ashbourne (Mayfield House)	·056	·051	·035	·031	·021	·043	·030	·063	·033	·048	·054	·032	·046
Lincoln 3	Cranwell Aerodrome	·040	·045	·038	·043	·037	·058	·052	·093	·021	·054	·046	·039	·047
Nottingham ...2	Sutton Bonington Agricultural Coll.	·052	·040	·033	·038	·035	·057	·053	·080	·050	·052	·050	·043	·050
,, ...5	Nottingham (Trent Lane)	·053	·053	·042	·106	·083	·072	·071	·099	·063	·067	·072	·054	·064
,, ...5	Worksop (Hodsock Priory)	·041	·049	·046	·042	·057	·041	·037	·062	·053	·062	·068	·049	·051
Cheshire 3	Birkenhead (Bidston Obsy.)	·050	·041	·030	·040	·053	·048	·047	·075	·040	·053	·065	·036	·049

† Values are for periods ending 24h. on last day of month.

Table XIII.—*Mean Rate of Rainfall per hour during* 1928—(*con.*).

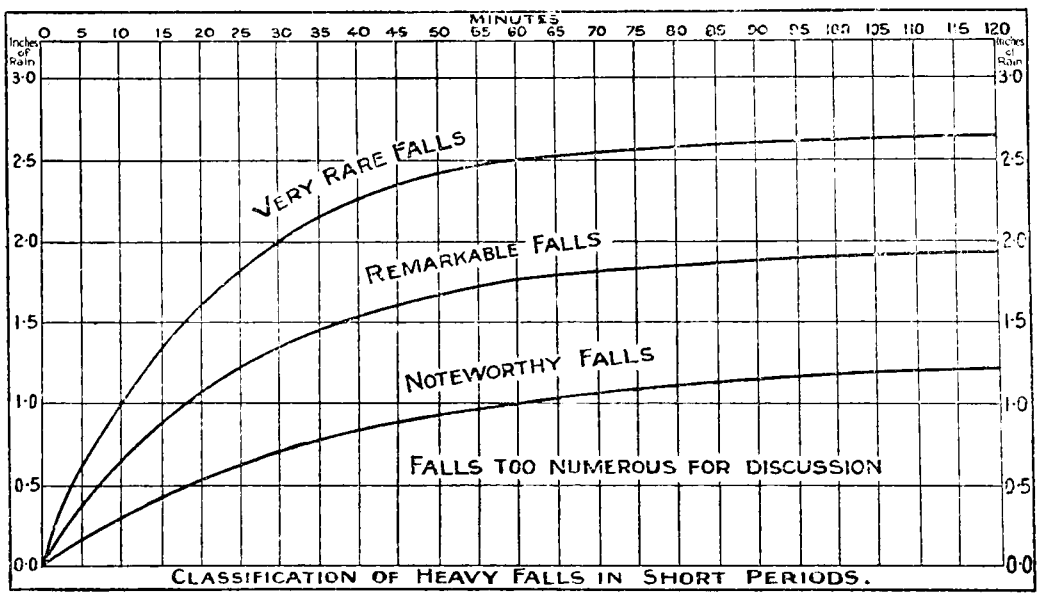
County and River Division.	Station.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
		ins. per hr.	ins. per hr.	ins. per hr.	ins. per hr.	ins. per hr.	ins. per hr.	ins. per hr.	ins. per hr.	ins. per hr.	ins. per hr.	ins. per hr.	ins. per hr.	ins. per hr.
S. Lancs.....3	Bolton (Queen's Park)	·078	·062	·038	·033	·036	·066	·063	·085	·038	·087	·071	·043	·064
C. Lancs. 1	Nelson (Walton Lane).....	·074	·062	·044	·050	·038	·046	·054	·094	·037	·058	·066	·039	·059
,, ...2	Leyland (Worden Hall)	·064	·055	·039	·039	·050	·051	·064	·071	·039	·051	·057	·044	·053
,, ...3	Southport (Hesketh Park)	·063	·062	·040	·047	·069	·052	·061	·057	·046	·071	·068	·055	·059
N. Lancs. 4	Lancaster (Greg Observatory)	·071	·080	·049	·048	·042	·070	·097	·089	·076	·057	·069	·054	·068
W.R. Yorks ...7	Rotherham(Aldwarke Sewage Works)	·037	·054	·044	·036	·043	·059	·037	·065	·029	·048	·033	·032	·043
,, ...9	Haworth (Lower Laithe Res.).....	·073	·065	·058	·045	·043	·054	·051	·065	·047	·057	·057	·029	·057
,, ...9	Earby (Sewage Works)	·092	·094	·066	·081	·060	·068	·073	·093	·071	·062	·083	·071	·079
,, ...9	Skipton (Town Hall)	·059	·075	·044	·042	·063	·045	·052	·077	·041	·048	·052	·037	·054
N.R. Yorks. ...2	Felixkirk (Mt. St. John)	·048	·038	·039	·028	·035	·052	·029	·089	·035	·052	·062	·030	·048
Glamorgan 3	Swansea (Victoria Park)	·076	·061	·048	·055	·082	·074	·069	·081	·052	·086	·071	·057	·069
Brecon 7	Cray Reservoir	·067	·054	·043	·049	·036	·054	·065	·077	·048	·088	·070	·054	·062
Flint 1	Sealand Aerodrome.....	·036	·032	·025	·032	·052	·038	·032	·055	·035	·045	·051	·031	·038
Anglesey	Holyhead (Salt Island).....	·057	·056	·032	·027	·051	·046	·048	·052	·049	·064	·071	·049	·052
Dumfries.....5	Eskdalemuir Observatory	·076	·064	·044	·041	·032	·056	·046	·078	·050	·061	·060	·050	·058
† ,, ...5	,, ,, ...	·076	·065	·043	·040	·032	·055	·047	·078	·050	·062	·059	·050	·058
Berwick.....3	Swinton House	·058	·047	·044	·062	·035	·054	·079	·069	·074	·054	·038	·033	·052
Renfrew 2	Renfrew Aerodrome	·053	·048	·029	·028	·045	·045	·035	·052	·044	·043	·055	·046	·045
,, ...3	Greenock (Prospect Hill)	·077	·053	·043	·057	·050	·056	·056	·076	·069	·074	·083	·062	·064
Argyll 4	Glenleven (Blackwater Dam)	·095	·093	·055	·062	·045	·063	·052	·086	·078	·079	·072	·067	·074
Fife 3	Leuchars	·054	·043	·037	·039	·041	·040	·045	·058	·041	·042	·044	·044	·044
Aberdeen 2	Aberdeen (King's College)	·047	·042	·043	·047	·032	·049	·041	·048	·044	·050	·049	·048	·045
† ,, ...2	,, ,, ...	·047	·042	·043	·047	·032	·049	·041	·048	·044	·050	·049	·048	·045
Shetland 3	Lerwick Observatory	·061	·054	·033	·054	·057	·070	·047	·108	·048	·077	·048	·048	·056
Cork 7	Cork (University College)	·060	·049	·053	·073	·071	·058	·042	·070	·068	·069	·069	·054	·061
Kerry.....3	Valentia Observatory	·062	·054	·053	·058	·056	·058	·037	·108	·069	·074	·074	·068	·065
† ,, ...3	,, ,, ...	·062	·055	·054	·058	·056	·059	·037	·108	·069	·074	·074	·068	·065
Armagh 5	Armagh Observatory	·036	·036	·030	·034	·032	·047	·033	·091	·045	·047	·038	·024	·039
Antrim 5	Aldergrove Aerodrome	·036	·030	·028	·033	·033	·037	·043	·061	·040	·045	·035	·029	·037
Londonderry .5	Glenedra Lodge	·047	·037	·033	·031	·031	·049	·049	·066	·048	·060	·043	·046	·046

† Values are for periods ending 24h. on last day of month.

6. HEAVY FALLS IN SHORT PERIODS IN 1928.

Heavy falls of rain in short periods are of considerable economic importance, for they are frequently of such intensity as to cause extensive flooding, often accompanied by much surface erosion and structural damage to property. Considerable damage may occur as a result of the accumulation of flood water below the area of heaviest rainfall. The amount of the damage depends on a number of other factors, such as the shape of the catchment area, the nature of the ground and vegetation, whether the water finally flows into the river or sea at high or low tide and the relative positions of the towns. In towns the floods may be aggravated by the failure of the drainage system to cope with the demands made upon it.

Since 1908, this section of *British Rainfall* has contained a classification of intense falls into three categories designated " worthy of notice," " remarkable " and " very rare." The classification has been effected by reference to a diagram of which a copy is reproduced. This diagram indicates by continuous curved lines the upper and lower limits of rainfall which must fall in stated times in order that the fall may be admitted into one of the three categories.



CLASSIFICATION OF HEAVY FALLS IN SHORT PERIODS.

The diagram was prepared almost exclusively from eye observations of rainfall duration and from corresponding measurements of rainfall in ordinary rain-gauges.

On pp. 45, 46 of *British Rainfall*, 1926, reasons were given for supposing that the diagram at its left-hand side does not conform with the actual facts as revealed by records from self-recording gauges. On this account, the data of Table XV have been divided into two sections, one giving results from eye observations, which are properly comparable with the diagram, and the other giving results from autographic records, which are not truly comparable with the diagram for falls of short duration.

A complete list of the recorded falls of " very rare " intensity of one hour or less is given in Table XIV, where readings of ordinary as well as of autographic gauges are included. There are no entries for 1928.

In Table XV particulars are given of falls recorded in 1928 which reached at least the intensity " worthy of notice." Unlike Table XIV, falls of longer duration than one hour are included, the upper limit being 2 hours. Not more than one entry is made for the same shower for any station. The entry gives the largest amount recorded with a mean intensity " worthy of notice," " remarkable " or " very rare," as the case may be, an entry at the higher rate being in general preferred. Intense falls of less duration than five minutes have not been included in the table ; since in such cases the error is likely to be relatively large and such falls are not usually of practical importance.

In accordance with practice the geographical distribution of the heavy falls of Table XV is given in the following summary. The analysis probably separates the areas of more frequent and intense falls from those relatively immune, although it cannot be expected to indicate the actual relative frequency of intense falls in each area.

Number of Exceptional Rains of Two Hours' Duration or less.

	England and Wales.								
	S.E.	S.W.	N.E.	N.W.	Total.	Scotland.	Ireland.	British Isles.	Per cent of records received.
Average 1868–1928	15·9	7·7	4·3	2·4	30·3	2·2	1·5	34·0	1·0
1928 (*a*) ..	3	2	4	1	10	2	2	14	0·3
1928 (*b*) ..	2	0	0	2	4	1	4	9	0·2
1928 Sums ..	5	2	4	3	14	3	6	23	0·5

(*a*) Observations made without autographic rain-gauges.
(*b*) Readings of autographic gauges.

In making the comparison of the two sets of figures with the average values it should be remembered that since 1868 the number of observing stations has steadily increased, while the number of autographic rain-gauges has also increased more especially of recent years. A fairly good indication of the frequency of falls in 1928, in relation to the average, is probably provided by comparing the falls made without autographic rain-gauges with the average. This indicates that intense falls in short periods in 1928 were much less frequent than is usually the case.

Table XIV.—*Rainfalls of Very Rare Intensity lasting for One Hour or less.*

Year.	Date.	Div.	Station.	Amount.	Duration		Rate Per Hour
				in.	H.	M.	in.
1912	May 8	XV	Alexandria	·26	0	1½	10·40
1888	Mar. 24	XI	Chepstow, Shirenewton Hall ..	·33	0	2	9·90
1917	July 14	IV	Norwich, Ipswich Road	·47	0	2½	11·28
1893	Aug. 10	VIII	Preston, Corporation Offices ..	1·25?	0	5?	15·00?
1893	June 14	XI	Chepstow, Shirenewton Hall ..	·62	0	5	7·44
1925	May 10	II	Godalming, Charterhouse	.60	0	5	7·20
1906	Aug. 2	II	Guildford, Piccard's Rough ..	·89	0	8	6·68
1892	July 3	VIII	Bolton, The Park	1·00?	0	9?	6·67?
1927	Sept. 23	V	Chagford (Dartmoor S'torium)	1·30	0	10	7·80
1902	May 30	III	Cambridge, Sydney Street ...	1·10	0	10	6·60
1878	June 23	I	St. Pancras, Camden Square..	1·04	0	10	6·24
1912	July 21	VII	Wirksworth, Manor House ..	1·00	0	10	6·00
1918	July 16	II	Purley, Oakwood Avenue	1·10?	0	11	6·00?
1914	Aug. 14	XI	Guernsey, St. Martin's Road..	1·50	0	15	6·00
1878	June 23	I	St. Pancras, Camden Square..	1·43	0	15	5·72
1927	July 11	I	Balham High Road.....	1·50	0	18	5·00
1875	Aug. 7	II	Canterbury, Harbledown	2·12	0	20	6·36
1878	June 23	I	St. Pancras, Camden Square..	1·82	0	20	5·46
1897	June 24	III	Luton Pumping Station	1·65	0	20	4·95
1920	May 29	VIII	Leyland, Worden Hall	1·65	0	20	4·95
1878	June 23	I	St. Pancras, Camden Square..	2·30	0	28	4·93
1880	July 22	XI	Cowbridge, Ash Hall	2·90	0	30	5·80
1915	July 4	XI	Abergavenny, The Chain	2·20	0	30	4·40
1918	July 17	I	Shad Thames Pumping Station	2·07	0	30	4·14
1895	June 27	IX	Middleton-in-the-Wolds	2·00	0	30	4·00
1902	Sept. 10	II	Surbiton, Vronvelin	2·00	0	30	4·00
1920	May 25	IV	Hatfield, Broad Oak, Barrington	2·79	0	45	3·72
1904	July 27	II	Cooling, Broomy Farm	2·66	0	45	3·55
1909	Sept. 29	V	Ilfracombe Reservoir	2·50?	0	45	3·33?
1895	June 26	V	Marlborough	2·71	0	50	3·25
1915	June 30	IV	Mildenhall	2·63	0	50	3·16
1903	July 18	VI	Crewe, Betley Hall	2·53	0	50	3·04
1905	July 9	III	Enfield, Carisbrooke	2·44	0	50	2·93
1911	May 31	II	Epsom, Ashley Road	2·44	0	50	2·93
1901	July 29	II	Wadhurst, Lower Cousley Wood	3·25?	0	55	3·55?
1913	June 17	IV	Elvedon Hall	2·85	0	58	2·95
1901	July 12	II	Maidenhead, Lowood	3·63	1	0?	3·63?
1903	May 30	II	Beddington Corner	3·50	1	0	3·50
1911	May 26	II	Fareham, The Mount	3·00	1	0	3·00
1897	July 21	IV	Ipswich, Bishops Hill	2·95	1	0	2·95
1895	June 26	VI	Worcester, Diglis Lock.....	2·75	1	0	2·75
1909	June 1	XII	Carsphairn, Shiel	2·71	1	0?	2·71?
1873	July 28	XVII	Fettercairn	2·60	1	0	2·60
1889	June 7	II	Tonbridge, Ferndale	2·60?	1	0?	2·60?
1886	July 25	VIII	Sale, Brooklands	2·58	1	0	2·58
1899	July 22	V	Dorchester Water Works	2·56	1	0?	2·56?
1875	July 22	V	Trowbridge, Sunnyside	2·53	1	0	2·53
1875	June 29	III	Cardington	2·50	1	0	2·50
1886	July 25	IX	Wakefield, Stanley Vicarage ..	2·50	1	0	2·50

Table XV.—*Heavy Falls in Short Periods in* 1928.

County and River Division.	Station.	Date.	Amount.	Duration.	Rate per Hour.
	(a) EYE OBSERVATIONS.		in.	min.	in.
Lincoln 3	Anwick Vicarage	Aug. 29	·20	5	2·40
Flint 2	Bodfari (Cae Gwyn)	June 6	·43	10	2·58
Galway 5	Ahascragh (Clonbrock)	June 13	·64	15	2·56
Northumberland 3	Newcastle	Aug. 29	·50	15	2·00
Cambridge 2	Oakington	June 6	·51	17	1·80
Berkshire 5	Uffington Vicarage	Aug. 12	·63	30	1·26
Kent 4	Ashurst Park	Aug. 1	2·11	45	2·81*
Stirling 1	Stirling (Craigforth)	June 9	1·36	45	1·81
York, N.R. 4	East Ayton (Derwent House)	Sept. 1	·88	45	1·17
Leicester 2	Market Harborough (Rose Hill)	Aug. 12	1·49	60	1·49
North Devon ...2	Witheridge	Aug. 27	1·06	60	1·06
Somerset 1	Bath (Combe Down).....	Aug. 27	1·05	60	1·05
Antrim 5	Broughshane (Tullymore School)	June 9	1·98	90	1·32
Aberdeen 1	Drumoak (Drum Castle)	Aug. 26	2·00	105	1·14

County and River Division.	Station.	Date.	Amount.	Duration.	Rate per Hour.
	(b) AUTOGRAPHIC RECORDS.		in.	min.	in.
Cheshire 3	Birkenhead (Bidston)	Aug. 8	·35	5	4·20
Aberdeen 2	Aberdeen (Kings College)	July 28	·20	6	2·00
Surrey 4	Croydon Aerodrome	Aug. 26	·20	6	2·00
Antrim 5	Aldergrove Aerodrome	Aug. 26	·20	6	2·00
Antrim 5	Aldergrove Aerodrome	Sept. 9	·20	6	2·00
Armagh.....5	Armagh Observatory	Aug. 26	·39	10	2·34
C. Lancs. 1	Nelson (Walton Lane Cemetery)	Aug. 29	·32	10	1·92
Sussex 5	Hellingly (Burlow)	June 13	·55	18	1·83
Armagh.....5	Armagh Observatory	Aug. 29	1·69	50	2·03*

* "Remarkable" fall.

The total number, 23, is considerably fewer than that for any of the last four years, when there were generally 2 or 3 times as many. The years 1921, 1922 and 1923 were also noteworthy for few heavy falls in short periods, the annual numbers being 20, 10 and 22 respectively.

As is usually the case the bulk of the entries in Tables XV are for the three months June, July and August. In fact, there are only two entries for the other months, viz., September 1st and 9th. Previously about two-thirds of the total number of intense falls on record have occurred in these three months. Most of the intense falls in 1928 occurred in August, June ranking next with six. The year 1928 was remarkable therefore for the small number of intense falls in short periods in all months but August.

Miss Bouverie considers that 1·78 inches fell in about two hours at Market Lavington to the north of Salisbury Plain on May 5th. It is noted that rain poured down the hill, and one street and many houses were flooded and in the allotments potatoes were washed out of the ground.

Capt. C. J. P. Cave noted an interesting case at Stoner Hill, Petersfield, of a heavy fall in a short time which would just qualify for inclusion into the class of "very rare." So far as can be ascertained from the trace of the recording gauge, ·18 inch fell in about one minute just after 19 h.* on May 17th.

June, 1928, was the wettest June over the country generally since that of 1912. The rain was mainly of the cyclonic type, and a number of heavy falls on rainfall days were noted (*see* Section 7) although intense falls were relatively few. The lack of correlation between the actual rainfall over the country and the number of intense falls is thus borne out by the values for June.

Entries for June 6th are given for Bodfari, Flintshire and Oakington Cambridgeshire. The former fall is confirmed by the observer at Denbigh where ·83 inch is reported as falling in two separate showers of 7 or 8 minutes each. At Oakington "a thunderstorm came up from the south at 13 h. 45 m., and in the following 17 minutes ·51 inch of rain fell." On the 9th intense falls occurred at Craigforth, Stirling and Broughshane in Co. Antrim, and on the 13th at Ahascragh in Co. Galway and Hellingly, Sussex.

Intense falls were common in August, occurring on the 1st, 8th, 12th, 26th, 27th and 29th. The entry for the 1st for Ashurst Park, near Tunbridge Wells, ranks as "remarkable." Mr. C. Field-Marsham reports that 2·11 inches fell between 13 h. 45 m. and 14 h. 30 m., and that "I was in London at the time but when I returned the place was flooded." The intense rain at Bidston Observatory, near Liverpool, on the 8th occurred between 17 h. 15 m. and 17 h. 20 m., and is reported

* In this account time is expressed in terms of Greenwich Mean Time. During the summer, add one hour to get summer time.

as being rather heavier than the last severe thunderstorm which occurred there on July 28th last year. The following details are taken from the *Liverpool Post and Mercury* for the 9th :—

> " Seldom in this country is the approach of a storm so clearly heralded as was that of the one which struck Liverpool shortly after six o'clock last evening. Passengers on the ferryboats and the waiting crowds on the landing stage saw what appeared to be a wall of thick mist rapidly approaching across the water, and within a few seconds the deluge burst upon them with tropical intensity.
>
> " So heavy was the downpour that those who were unprepared with mackintoshes or umbrellas were drenched to the skin in the few seconds taken in rushing from the boats to the shelters on the stage. Scores of people ready to cross to the Cheshire side waited for the following steamer, rather than venture into the open the few yards necessary to cross the gangway.
>
> " In the centre of the city the gutters were turned into foaming waterways in a few minutes, and taxicabs and other vehicles raised showers of spray as they cleft the swimming streets. Water Street, Brunswick Street and James Street were converted into miniature streams. Pedestrians making their way to the pierhead quickly took shelter in shops and office buildings, and watched the water swirl over the kerb on to the pavement. The street grids were inadequate to cope with the fall, and only low spouting fountains indicated their position."

At Market Harborough 1·49 inches fell in one hour from 4 h. 15 m. to 5 h. 15 m. on the 12th. At Uffington Vicarage, Berkshire, ·63 inch fell in half-an-hour in the afternoon from 15 h. 15 m. to 15 h. 45 m.

Intense falls on the 26th occurred as far apart as Armagh Observatory, Aldergrove Aerodrome, near Belfast, Drum Castle in Aberdeenshire and Croydon Aerodrome. At Drum Castle the rain lasted from 13 h. to about 14 h. 45 m.

At Witheridge Vicarage, in North Devon, 1·06 inches fell on the 27th " almost exactly within the space of one hour, 10 h. to 11 h." At Combe Down, Bath, the heavy rain was later, a violent thunderstorm lasting from 11 h. 15 m. to 12 h. 15 m.

Major H. Sandford Claye has supplied the following details of the unusual storm on August 28th at Gunn Cottage, Goodleigh, some 5 miles east of Barnstaple :—

> " On August 28th there was an extraordinary storm at 15 h., when for 10 minutes frozen ice of various shapes fell with great violence, breaking vegetation and cutting off the corn, etc. Two hours afterwards I found any number of pieces as large as a sixpence and half an inch thick and the drifts under the walls were still visible four hours afterwards. The storm was accompanied by thunder. Some of the ice fragments were elongated and facetted like cut diamonds.

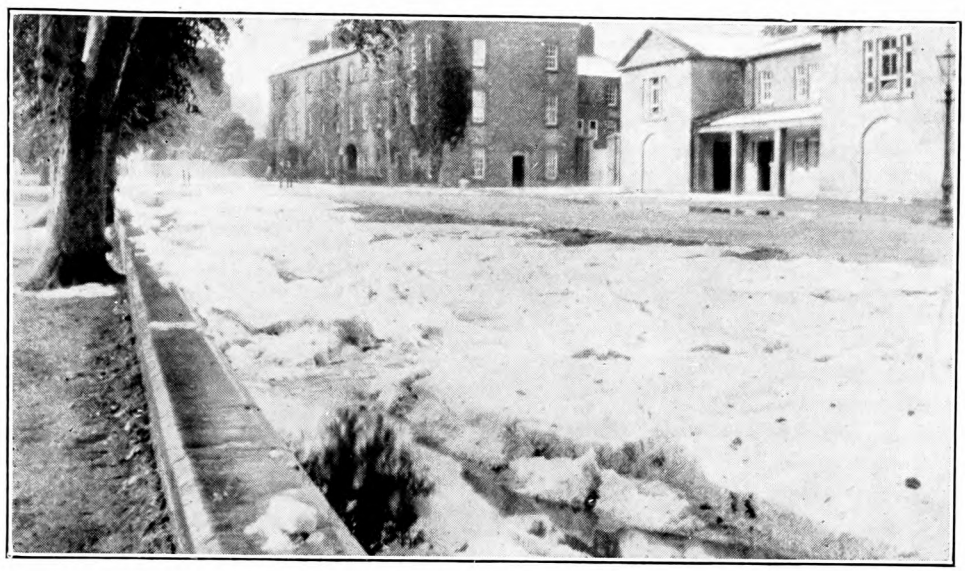
Three fields away to the south-west there was no hail, but it continued east and north-east up to Exmoor; High Bray and Brayford having much the same storm as I have to record. There was no hail at Barnstaple some five miles away."

Violent thunderstorms causing damage to houses and schools and extensive floods were experienced in many parts of the British Isles on the 29th, especially in the north of England. Entries are given for Anwick Vicarage, near Sleaford, Newcastle-on-Tyne, Nelson and Armagh Observatory. At Anwick Vicarage ·20 inch fell between 16 h. 27 m. and 16 h. 32 m. in the course of a short but very severe thunderstorm. At Newcastle the storm was one of the severest of recent years, being accompanied by vivid lightning. It occurred about noon. At Nelson ·32 inch fell approximately between 8 h. 25 m. and 8 h. 35 m. The Rev. W. F. A. Ellison has sent the following details of the remarkable thunderstorm at Armagh Observatory which gave an intense fall ranking as "remarkable." Two photographs are reproduced illustrating the unusual character of this storm.

"The thunderstorm of August 29th broke all records of the Armagh Observatory for intensity of rainfall. The locality is remarkable for its freedom from very heavy rains, and even more for the absence of severe electrical storms, which made the visitation the more unexpected. There was a good deal of distant thunder during the forenoon, and the clouds looked very threatening at times, but no rain fell, and by 13 h. the threatening appearance of the weather had almost cleared off. It seemed as if the thunderclouds were about to disperse quietly as usual. But just before 15 h. the storm broke without any warning. It did not approach, but seemed to develop right overhead out of nothing at all. A few very large drops of rain, making splashes as big as pennies, then a flash, and a crash of thunder following instantaneously, and not rain but hail in stones as big as nuts and marbles, fell in sheets. All roof gutters and drain traps were quickly choked by the hailstones washed into them, and water poured into the houses through roofs, while the lower parts of the town were flooded to a depth of two to three feet. Armagh lies in a depression and most of the approaches to it are downhill. Each road leading into the town became in a few minutes a river discharging into the streets, bringing an amount of water which the drains could not have coped with, even had they not been obstructed by masses of hail swept into them. The flood even lifted the manhole covers from the culverts, and the water issuing therefrom added its quota to the surface deluge. The lightning and thunder were of a violent and terrifying description, such as the town had not seen for twenty years or more. According to some observers two storms appeared to develop, one a little to the south-east and the other to the north of the town, and to converge upon it. There was little or no wind, and what there was came in uncertain puffs from different directions. The smoke from one mill chimney was seen to ascend in a corkscrew spiral towards the developing storm.

"The storm lasted altogether less than an hour, but the greatest intensity lasted about 20 minutes. The rainfall, as recorded at the Observatory, was 1·69 inch in 50 minutes, of which one inch fell in the first 20 minutes. The trace of the Beckley recording rain-gauge was so close that it was difficult to say whether it had emptied itself four or five times during that time. The amount collected in the Snowdon gauge close beside it, however,

[*to face p.* 48



HAIL LYING A FOOT DEEP IN THE ROADWAY, THE MALL, ARMAGH, AUGUST 29TH, 1928.

THE FLOODED CRICKET FIELD IN THE MALL, ARMAGH, UNDER 2 TO 3 FT. OF WATER, AUGUST 29TH, 1928. THE FLOATING WHITE MASSES ARE HAIL.

agreed with the larger amount. The greater part of the precipitation being hail, the rate of fall must have been considerably greater than the gauges indicated, as the funnels were nearly full of hail, which took some time to melt. There were two distinct forms of hailstones: small cones with hemispherical base, and spheres of clear ice. These were mixed in about equal proportions. Such was the quantity of hail that heaps of it were still lying in corners on September 1st in spite of a maximum temperature of 64° to 65° F. on each of the three following days. The storm was quite local, places only a mile or two distant from the town having no hail and only a moderate rainfall.

"What makes the rainfall the more remarkable is that it followed two other rainstorms of 1·22 inch and 1·51 inch respectively, on the two previous Sundays, giving a fall of 5·10 inch (including minor amounts) in 10 days."

Intense rain also fell in various parts of Perth, Fife and Angus (Forfar) on the 29th. It is reported that at Eden Valley House in the neighbourhood of Loch Freuchie 1·80 inches fell in little over an hour.

At Pitlochry rain commenced to fall about 15 h. 30 m. and continued in sheets until shortly after 17 h., after which the fall became less heavy. Hill streams were quickly affected, but fortunately the deepening of the bed of Moulin Burn, following last year's flood, kept that stream to its channel.

At East Ayton, Yorks., N.R., ·88 inch fell between 16 h. and 16 h. 45 m. on September 1st.

An interesting note is given by the observer at Hinton Blewitt Manor, to the south of Bristol, about the heavy rain of October 26th: "Rain began in the forenoon and an extraordinarily heavy fall began at 15 h., which lasting 15 minutes measured roughly half an inch."

In the preceding section the material has been provided both from autographic records and from eye observations at any of the 5,000 rainfall stations. Another method of dealing with the frequency of heavy falls of rain is to confine attention to the stations with autographic records and to examine the traces for all the rain which occurs at these stations. That has been done for the stations set out in Table XVI. In the tabulations on which the classification is based, the shortest interval in which ·2 inch (5 mm.) falls is entered for each day on which so much rain occurs. Similarly with falls of ·4 in. and 1 inch. Cases in which a fall of the given amount occupied parts of two days are included, but each fall counted is of less than 24 hours'

Table XVI.—*Number of Days on which specified amounts of Rain fell in specified times during* 1928.

County.	Place.	0·2 inch.				0·4 inch.				1 inch.			
		6 min. or less.	15 min. or less.	30 min. or less.	60 min. or less.	15 min. or less.	30 min. or less.	60 min. or less.	2 hours or less.	1 hour or less.	2 hours or less.	5 hours or less.	24 hours or less.
London	Camden Square	0	0	4	6	0	0	1	2	0	0	0	0
Surrey	Croydon	1	2	5	12	0	1	2	6	0	0	0	4
„	Kew Observatory	0	1	4	10	0	0	1	7	0	0	0	1
Kent	Lympne	0	1	5	9	2	2	2	3	0	0	0	1
Hampshire	Calshot	0	0	1	12	0	0	0	3	0	0	0	3
„	Worthy Down	0	0	3	10	0	0	0	3	0	0	0	3
„	South Farnborough	0	2	5	8	0	0	0	4	0	0	0	1
Suffolk	Felixstowe	0	0	0	4	0	0	0	1	0	0	0	1
Devon	Cattewater	0	1	1	7	0	0	0	1	0	0	1	4
Lincoln	Cranwell	0	0	3	6	0	0	1	2	0	0	0	1
Lancashire	Southport	0	1	1	12	0	0	0	2	0	0	0	4
Flint	Sealand	0	1	2	4	0	0	0	0	0	0	0	0
Anglesey	Holyhead	0	1	2	13	0	0	1	4	0	0	0	2
Dumfries	Eskdalemuir	0	3	14	40	0	0	4	22	0	0	2	18
Renfrew	Renfrew	1	2	6	12	0	0	1	3	0	0	0	5
Fife	Leuchars	0	0	0	5	0	0	0	2	0	0	1	1
Aberdeen	Aberdeen	1	1	1	6	0	0	1	1	0	0	0	3
Shetland	Lerwick	0	0	2	8	0	0	0	3	0	0	1	4
Co. Kerry	Valentia Observatory	0	3	4	14	0	1	2	5	0	0	0	12
Co. Armagh	Armagh Observatory	2	3	4	11	2	2	2	2	1	1	2	5
Co. Antrim	Aldergrove	2	2	3	10	0	0	0	4	0	0	0	2

The falls are not necessarily continuous nor are they always confined to one calendar day. If a fall occupies parts of two days it is regarded as belonging to the day which contributes the greater share to the amount of the fall. Not more than one fall of each specified amount is credited to any day; if more than the specified amount fell on any day, that part of it which fell in the shortest time is used for the table.

An entry in any of the first three columns under each of the headings 0·2, 0·4 and 1 inch naturally recurs in the column or columns to the right.

duration, and only one fall of the given amount is credited to each calendar day. In the classification adopted in Table XVI, the first time limit for each of the stated amounts is nearly in accordance with the specification of a noteworthy Fall (*see* diagram) and corresponding entries will be found in Table XV.

In discussing the results it must be borne in mind that the time scales of the autographic records are so small that the discrimination between falls of ·2 inch which last more or less than 6 minutes is difficult. The other limiting rates are comparatively easy to judge.

7.—HEAVY FALLS ON RAINFALL DAYS IN 1928.

The daily measurements of rain which are set out in this Section are (*a*) those of falls of 2·5 inches or more in the rainfall day, and (*b*) those of falls which amount to at least 7·5 per cent. of the total recorded for the year 1928. A fall of 2½ inches in a day at any station is sufficiently remarkable to be noticed, but as such heavy falls are more frequent in the normally wet areas of mountain districts than elsewhere, the criterion of 7½ per cent. was introduced to admit certain falls of less than 2½ inches in areas where the total rainfall for the year is less than 33·3 inches. In this way daily falls which are heavy in relation to the local standard are not neglected. In a wet year like 1928, when a relatively small part of the country had annual totals of less than 33·3 inches, and thunderstorms were relatively few, the second criterion finds few applications; examples occurred, however, on June 13th, August 20th and October 10th. It will be seen that by far the majority of the falls noticed satisfy criterion (*a*), but do not satisfy criterion (*b*), and that on June 13th and August 20th, both criteria were simultaneously satisfied at a few stations. Thus, the greatest amount measured in a day in 1928 was 7·77 inches on June 28th at Blaenau Festiniog in North Wales: this amount formed only 5·3 per cent. of the total for the year at that station, viz., 146·57 inches. The "highest percentage" amount was 12·9 per cent. at Marton-in-Cleveland on June 13th, but the actual amount of the fall was 3·26 inches, a relatively moderate amount.

A table showing the absolute maximum daily rainfall and the absolute maximum daily percentage reported for each year from 1865

TABLE XVII.—*Maximum Daily Fall and Maximum Percentage, 1913 to 1928.*

Year.	ABSOLUTE HIGHEST RAINFALL.				ABSOLUTE HIGHEST PERCENTAGE.				Year.
	Depth.	Per cent.	Station.	Div.	Per cent.	Depth.	Station.	Div.	
	in.					in.			
1913..	6·06?	**26·0?**	Doncaster Pumping Station.	9	**26.0?**	6·06?	Doncaster Pumping Station.	9	1913
1914..	6·35	4·1	Pen-y-Gwryd	11	14·8	3·35	Upminster	4	1914
1915..	7·06	19·7	Dalcross	18	19·7	7·06	Dalcross	18	1915
1916..	8·20	5·7	Kinlochquoich	18	13·1	3·91	Portland Bill	5	1916
1917..	**9·56**	..	Bruton	5	21·8	8·39	Aisholt	5	1917
1918..	4·95	9·2	Douglas.....	11	12·3	3·36	Woodsetts Grange ..	9	1918
1919..	4·50	5·9	Corran	15	11·1	3·57	Ayr Cemetery	15	1919
1920..	6·81	5·4	Dungeon Ghyll	10	15·6	4·69	Elkington Hall	7	1920
1921..	6·10	5·2	,, ,, ...	10	21·3	3·15	Pulham	4	1921
1922..	5·14	5·6	Ardgour House	15	16·5	4·70	Doncaster, Carr Ho. Hospital.	9	1922
1923..	5·57	3·9	Llechwedd Quarry ..	11	11·6	**4·16**	Rugeley, Brindley Bk	6	1923
1924..	9·40	19·5	Cannington, Brymore	5	19·5	**9·40**	Cannington, Brymore	5	1924
1925..	*4·13*	*2·8*	Snowdon (L. Llydaw Copper M).	9	11·4	*2·35*	Boston (Fishtoft S) .	7	1925
1926..	6·05	9·4	Abergwesyn (Nantneuadd)	11	10·9	4·57	Pembroke Dock	11	1926
1927..	6·00	4·6	Blaenau Festiniog (Llechwedd Q.)	11	*10·7*	4·00	Wolverhampton Town Hall	6	1927
1928..	7·77	5·3	Blaenau Festiniog (Oakeley Q.)	11	12·9	3·26	Marton-in-Cleveland (Southcroft).	9	1928

The largest entry in each column is shown in heavy type and the smallest in italic type.

to 1921 was published in *British Rainfall*, 1921, p. 86. The portion of that table from 1913, completed by the addition of particulars for the years 1922 to 1928, is printed here. This portion contains the highest values shown in the complete table from 1865 to 1928, both as to amount and percentage ; these figures are printed in heavy type.

Particulars of the 12 largest falls of the year 1928 are given in Table XVIII. The table shows also the year's total at each of the stations and the percentage of that total which is accounted for by the highest daily fall. Only one entry is given for each of the stations included in the table.

TABLE XVIII.—*The largest Daily Rainfalls in* 1928.

Date.	Div.	Station.	Depth.	Per cent. of Year.	Total for Year.
			in.	%	in.
June 28	XI	Blaenau Festiniog (Oakeley Q.)	7·77	5·3	146·57
June 28	XI	Blaenau Festiniog (Llechwedd Q.)..	7·75	5·3	146·56
June 28	XI	Snowdon (L. Llydaw Copper M.) 9 ..	7·25	4·0	183·33
June 28	XI	Snowdon (Llydaw Intake) 10	6·85	3·9	176·91
June 28	XI	Snowdon (Cwm Dyli) 11	6·47	4·0	160·07
Dec. 15	XXIII	Mourne Mount'ns. (Fofanny Res.)..	5·45	5·3	103·61
June 28	XI	Beddgelert (Co. School)	5·16	4·3	120·85
June 28	X	Buttermere (Hassness)	4·68	3·3	144·30
Aug. 20	X	Kirkby Stephen (Redman House) ..	4·35	7·2	60·53
June 28	X	Rosthwaite (The Moraine)	4·34	3·1	139·64
Aug. 20	IX	Barningham Park	4·31	9·7	44·17
Dec. 25	XI	Rhondda (Pont Lluest Wen R.) 1 ..	4·11	3·3	126·04

Of the 12 entries only two (viz., those for Barningham Park and Kirkby Stephen) refer to districts where the total fall for the year was less than 100 inches. The daily values range from 7·77 inches to 4·11 inches. Eight of the entries refer to June 28th, when heavy rain fell on hilly ground in Yorkshire, Cumberland, Westmorland and North Wales, and six of the eight entries relate to the Snowdon area.

The first four entries of this table qualify for admission to the list of heavy falls of 6·5 inches or more which was printed in *British Rainfall*, 1926, p. 73. The list is thereby extended to include 32 entries. The highest daily fall on record was one of 9·56 inches at Bruton, Somerset, on 28th June, 1917.

Chronicle.

In the tables included in the following account of the heavy falls of the year, a daily fall which is the maximum fall for the year at the station is indicated by ordinary Roman type ; other falls are in *italics*.

A striking feature of the tables of heavy falls on rainfall days in 1928 is the absence of falls due to thunderstorms. As a rule, one or more days of each year provide good examples of deluges which are the direct result of the unstable state of the atmosphere in thundery weather—this year there is no pronounced example. By far the majority of heavy falls listed in the following chronicle are associated with Atlantic depressions of which the centres pass eastwards in the Iceland region. On these occasions the British Isles are in the S.E. quadrant of the depressions, the winds are S.W. in direction and usually fresh or strong in force. The rain is of the " warm-front " type and locally in mountainous regions the falls are very considerable, being augmented by orographic effects, by which the relatively warm, moist current is lifted to such an extent as to provoke copious condensation which may last without intermission for many hours.

JANUARY was a stormy and extremely wet month. The characteristic feature of the daily weather maps was a succession of deep depressions passing from west to east, for the most part to the north of Scotland. When the year opened a depression out on the Atlantic to the west of Ireland was deepening and rapidly moving N.N.E. By the morning of the 2nd the western portion of the country had already experienced heavy falls of rain ; in the eastern portion it was still raining heavily at 9 a.m., so that in the east the fall was divided between two rainfall days.

January 1st.

Devon.	*in.*	or %	*Glamorgan.*	*in.*	or %
Lee Moor Clay Works ..	2·75	3·2	Pontycymmer (Police Station)	3·28	3·2
South Brent (Badworthy)	2·92	3·2	Rhondda (Pont Lluest Wen R.) 3	*2·56*	*2·5*
S. Brent (Didworthy San.)	3·14	4·5	*Kerry.*		
Holne (Church Park Cottage)	3·04	3·7	Kilgarvan (Inchimore) ..	2·56	1·7

The heavy falls of January 6th and 8th were also associated with deep depressions passing to the north of Scotland.

January 6th.

Argyll.—Glen Etive ..... *3·01 in.* or *2·5* per cent.

January 7th.

Merioneth.—Blaenau Festiniog (Llechwedd Q.) .. *2·69* in. or *1·8* per cent.

An exceptionally deep depression with centre skirting the north coast of Scotland was associated with the heavy falls of January 12th. Rainfall was general but the heaviest falls occurred on the high ground.

January 12th.

	in.	or %
Yorkshire.		
Slaidburn (Dunsop House)	*2·50*	*2·8*
Cumberland.		
Rosthwaite (The Moraine)	*3·24*	*2·3*
Buttermere (Hassness) ..	*2·61*	*1·8*
Westmorland.		
Grasmere (The Wray) ..	*2·86*	*2·1*
Glamorgan.		
Rhondda (Pont Lluest Wen R.) 1	*3·23*	*2·6*
Merioneth.		
Blaenau Festiniog (Oakeley Q.)	*2·87*	*2·0*
Blaenau Festiniog (Llechwedd Q.)	*2·90*	*2·0*
Carnarvon.		
Snowdon (Cwm Dyli) 11 ..	*4·01*	*2·5*
Snowdon (Llydaw Intake) 10	*2·93*	*1·7*
Snowdon (L. Llydaw Copper M,) 9	*2·85*	*1·6*

The rain of January 23rd fell, for the most part, in the warm sector of another intense depression. Again the heaviest falls occurred on the mountains.

January 23rd.

	in.	or %
Glamorgan.		
Pontycymmer (Police Station)	*3·06*	*3·0*
Treherbert (Tyn-y-Waun)	*2·73*	*2·3*
Rhondda (Pont Lluest Wen R.) 1	*2·93*	*2·3*
Brecon.		
Taff Fechan (Neuadd Rs.) 1A	*2·57*	*2·3*
Merioneth.		
Blaenau Festiniog (Oakeley Q.)	*3·33*	*2·3*
Blaenau Festiniog (Llechwedd Q.)	*3·37*	*2·3*
Carnarvon.		
Beddgelert (Co. School) ..	*2·80*	*2·3*
Snowdon (Cwm Dyli) 11	*2·67*	*1·7*
Snowdon (Llydaw Intake) 10	*2·63*	*1·5*
Snowdon (L. Llydaw Copper M.) 9	*2·77*	*1·5*

January 24th.

Inverness.—Loch Eil (Achdalieu)..... 2·50 *in.* or 3·3 per cent.

The heavy fall in Devon on January 28th was associated with the development of an intense secondary depression near the mouth of the Channel.

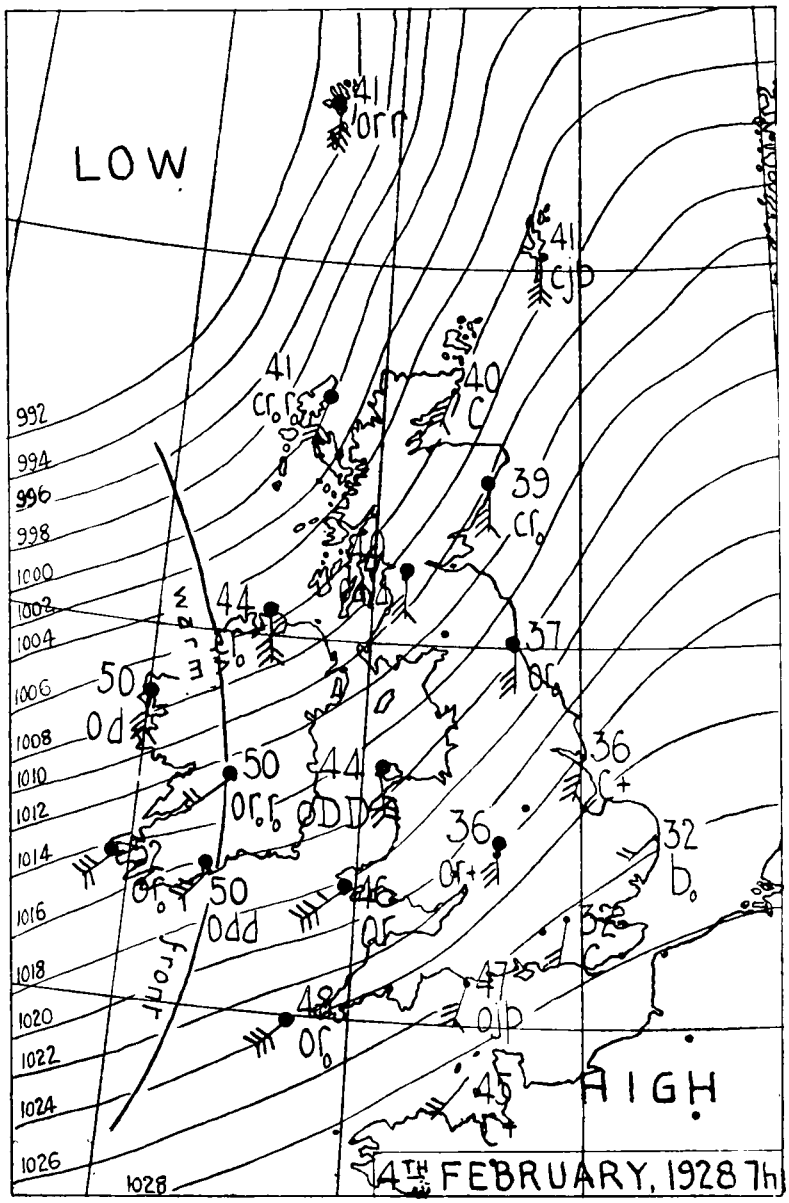
January 28th.

Devon.—Lee Moor Clay Works..... *2·57 in.* or *3·0* per cent.

FEBRUARY.—The heavy falls occurred for the most part during the first half of the month.

The rain of the 4th fell in the well-developed warm sector of a depression centred near Iceland. As usual on such occasions the heaviest falls were on the mountains.

Reproductions are given of the distribution of rainfall on this day, and of the weather map prepared from the 7 a.m. observations. The latter shows the great difference in temperature between east and west of the British Isles, and the probable position of the " warm front " at that hour.



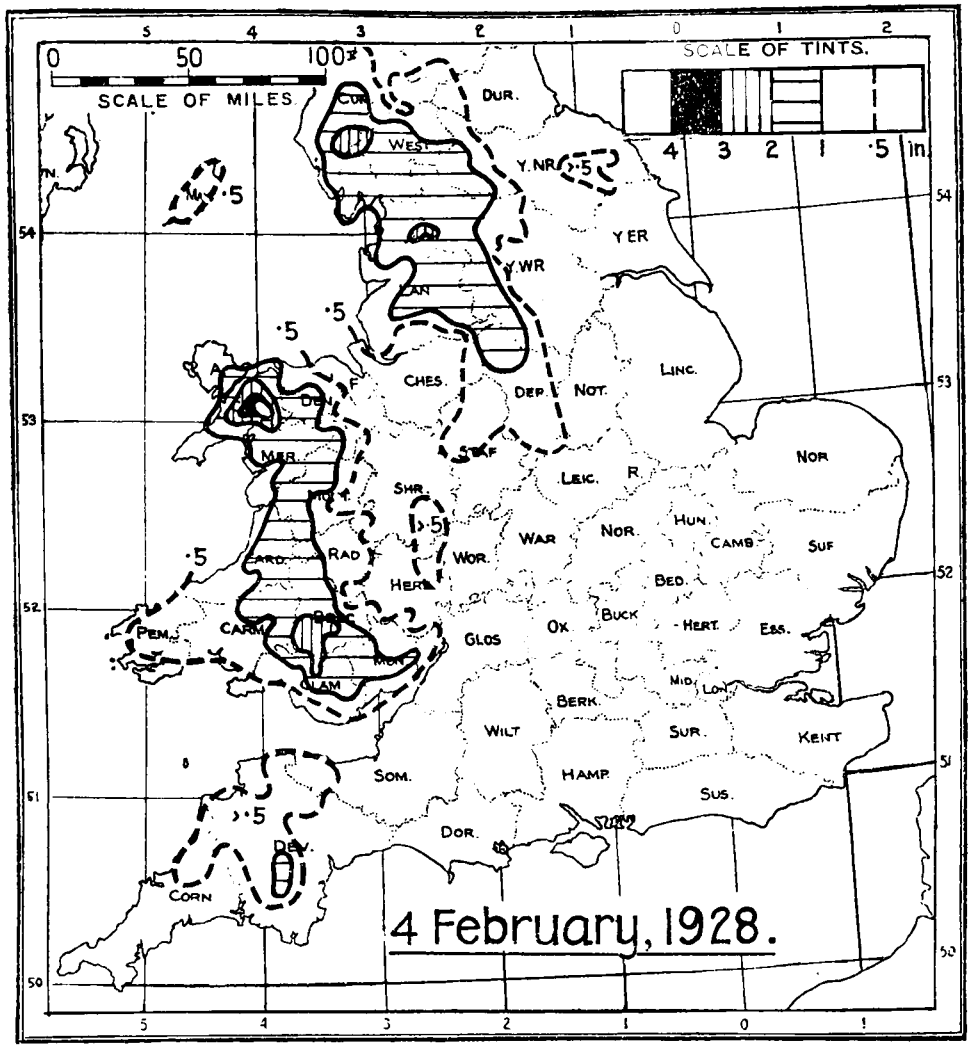
Synoptic Chart, 4th February, 1928, 7 h.

BAROMETER.—Isobars are drawn for intervals of 2 millibars, 1,000 millibars=29.53 mercury-inches.

WIND.—Direction is shown by arrows flying with the wind. Force, on the scale 0 to 12, is indicated by the number of feathers. A circle indicates calm.

TEMPERATURE is given by figures in degrees Fahrenheit.

WEATHER is indicated by the following notation:—
b, blue sky; bc, sky partly clouded; c, generally cloudy; o, overcast sky; p, passing showers; jp, passing showers within sight; d, drizzle; r, rain. Capital letters indicate "intense"; suffix $_0$ indicates "slight"; repetition of letters indicates continuity. ● = rain.



Rainfall, 4th February, 1928.

February 4th.

	in.	or %
Yorkshire.		
Slaidburn (Dunsop House)	*2·68*	*3·0*
Slaidburn (Footholme) ..	2·71	3·1
Cumberland.		
Rosthwaite (The Moraine)	*2·51*	*1·8*
Westmorland.		
Grasmere (The Wray) ..	*2·55*	*1·9*
Glamorgan.		
Rhondda W.W. (Llyn Fawr Res.)	*2·59*	*2·5*
Treherbert (Tyn·y·waun)..	*2·96*	*2·4*
Rhondda (Pont Lluest Wen R.) 2	*2·82*	*2·7*
Rhondda (Pont Lluest Wen R.) 1	*4·10*	*3·3*

	in.	or %
Brecon.		
Cardiff W.W. (Beacons Res.) 6	*2·52*	*2·4*
Taff Fechan (Neuadd Rs.) 1A	*2·63*	*2·4*
Taff Fechan (Neuadd Rs.) 4	*2·56*	*2·4*
Swansea W.W. (Cray Rs.)	2·77	2·8
Merioneth.		
Festiniog (Hafod Fawr) ..	*2·76*	*2·7*
Blaenau Festiniog (Llechwedd Q.)	*4·75*	*3·2*
Carnarvon.		
Bethesda (St. Ann's Vicarage)	*2·52*	*3·4*
Snowdon (Cwm Dyli) 11 ..	*4·65*	*2·9*
Snowdon (Llydaw Intake) 10	*4·45*	*2·5*

The heavy falls of February 6th, 7th, 8th were local in their incidence, other districts experiencing as a rule nothing more than showers. There were strong pressure gradients for westerly winds on these occasions and the conditions were generally unstable. The rains were apparently mainly orographic in character.

February 6th.

Inverness.	*in.*	or %	*Inverness.*	*in.*	or %
Loch Quoich (Glenquoich)	2·92	2·1	Loch Arkaig (Achnacarry)	2·61	2·4

February 7th.

Argyll.	*in.*	or %	*Inverness.*	*in.*	or %
Glen Etive	3·03	2·5	Loch Quoich (Kinlochquoich)	3·70	2·8

February 8th.

Carnarvon.	*in.*	or %	*Argyll.*	*in.*	or %
Snowdon (L. Llydaw Copper M.) 9	*2·50*	*1·4*	Glenleven (Blackwater Dam. S.)	2·56	2·1

Inverness.—Loch Arkaig (Achnacarry) ..... *2·55 in.* or *2·3* per cent.

Heavy and continuous rain and snow fell in mountainous districts of Northern England and Southern Scotland in connexion with the passage across Scotland of the centre of a deep depression on February 10th.

February 10th.

Cumberland.	*in.*	or %	*Westmorland.*	*in.*	or %
Rosthwaite (The Moraine)	*2·80*	*2·0*	Grasmere (The Wray) ..	*2·70*	*2·0*
			Kendal (Potter Fell) ..	*2·50*	*2·0*

The heavy falls in Wales on February 14th and 15th were associated with another deep depression, orographic effects being again pronounced locally.

February 14th.

Cardigan.	*in.*	or %	*Merioneth.*	*in.*	or %
Birmingham W.W. (Abergwngu)	2·70	3·1	Tal-y-llyn Rectory ..	*2·53*	*2·7*
Radnor.					
Birmingham W.W. (Claerwen)	2·50	2·9	Dolgelly (Bryntirion) ..	*2·55*	*3·5*

February 15th.

Glamorgan.	*in.*	or %	*Brecon.*	*in.*	or %
Rhondda W.W. (Llyn Fawr Res.)	2·64	2·5	Taff Fechan (Neuadd Rs.) 1A	2·70	2·4
Treherbert (Tyn-y-waun)..	*3·02*	*2·5*	Taff Fechan (Neuadd Rs.) 4	2·72	2·5
Rhondda (Pont Lluest Wen R.) 1	3·50	2·8	*Merioneth.*		
Brecon.			Blaenau Festiniog (Oakeley Q.)	*3·50*	*2·4*
Ystradfellte Reservoir ..	2·62	2·4	Blaenau Festiniog (Llechwedd Q.)	*3·40*	*2·3*
Cardiff W.W. (Beacons Res.) 6	2·58	2·5			

The heavy fall in the Mourne Mountains on 29th February occurred in a trough of low pressure which crossed the country from west to east, considerable differences of temperature occurring on the two sides of the trough.

February 29th.

Down.—Mourne Mountains (Fofanny Res.) ..... *2·83 in.* or *2·7* per cent.

MARCH.—The first day of March for which heavy falls are reported was the 17th, when a heavy fall in Co. Kerry was associated with a depression which had appeared over Iceland.

March 17th.

Kerry.—Kilgarvan (Inchimore) ..... *2·90 in.* or *2·0* per cent.

The area of heavy rain was later transferred to the high ground in Scotland. The rain was again derived from the warm sector of a depression centred to the north, the totals locally being materially augmented by orographic effects.

March 19th.

Dumbarton.—Arrochar (Braeside) ..... 2·50 *in.* or 2·1 per cent.

March 20th.

	in.	or %		*in.*	or %
Stirling.			*Perth.*		
Stronachlachar (Invergyle)	2·80	2·3	Lochearnhead	2·56	2·8
Argyll.			*Inverness.*		
Glen Etive	*3·00*	*2·5*	Glendessary	2·50	2·0

March 21st.

Inverness.—Dalwhinnie (Drumochter Lo.)..... 4·10 *in.* or 5·4 per cent.

The heavy fall in the Lake District on March 29th was associated with a deep depression, the centre of which followed a devious and unusual path across the British Isles.

March 29th.

Cumberland.—Buttermere (Hassness)..... *3·36 in.* or *2·3* per cent.

APRIL.—Only two days of heavy total falls appear in April, viz., the 14th and the 26th. On both occasions the heavy falls occurred in Southern Ireland, in association with S.E. or N.E. winds in the north-east or north of depressions out on the Atlantic.

April 14th.

	in.	or %		*in.*	or %
Cork.			*Cork.*		
Cork (University College)..	2·52	4·5	Glanmire (Lota Lodge) ..	2·62	4·3
Cork (Wellington Road) ..	2·57	4·5	*Kerry.*		
Midleton (Ballinacurra) ..	2·57	4·9	Kilgarvan (Inchimore)	*2·50*	*1·7*

April 26th.

Cork.—Shanagarry (Kinoith) ..... 2·60 *in.* or 5·6 per cent.

MAY was a dry month and no heavy fall of rain in the rainfall day was reported.

JUNE was a very wet month in most districts. A number of heavy falls on rainfall days were reported, of which those for June 28th were the most important ; these provided the highest values for the year.

The falls during the night of 7th June in Yorkshire can be referred to the action of a depression which apparently passed southwards down the east coast of Scotland.

June 7th.

Yorkshire.	*in.*	or %	*Yorkshire.*	*in.*	or %
Fewston (Timble Ings) ..	2·56	5·7	Fewston North	2·80	7·0

The fall of 9th June in North Wales is another example of warm-front rain, assisted locally by orographic effects.

June 9th.

Merioneth.—Blaenau Festiniog (Llechwedd Q.) .. *3·21 in.* or *2·2* per cent.

The fall in Co. Cork on 12th June occurred in a S.E. wind associated with a depression to the S.W. of Ireland. The centre of this depression subsequently passed eastwards to the North Sea on a track just south of Yorkshire, and caused the heavy falls noted there for 13th June.

June 12th.

Cork.—Garinish Island..... 2·65 *in.* or 2·6 per cent.

June 13th.

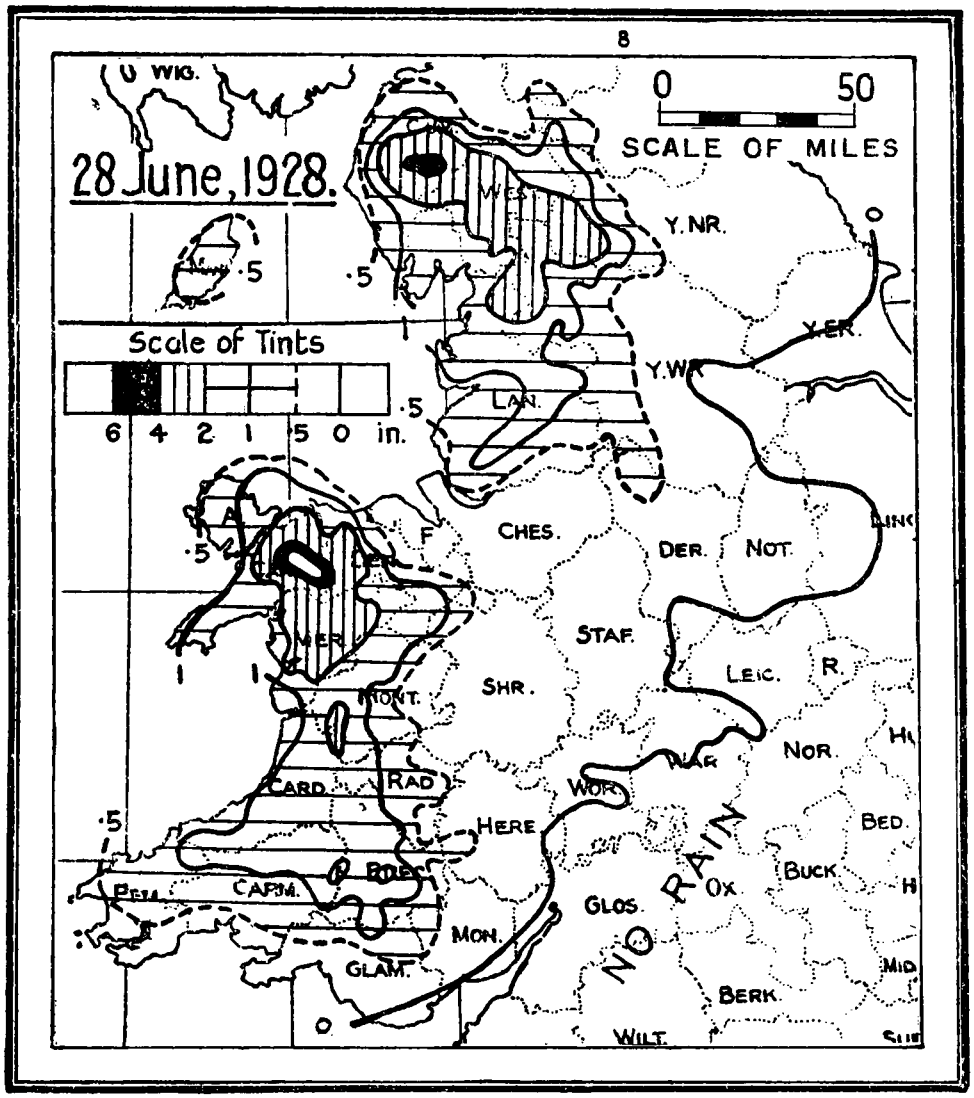
Yorkshire.	*in.*	or %	*Yorkshire.*	*in.*	or %
Crathorne Hall Gardens ..	1 92	7·6	Middlesbrough (Dorman Museum)	2·58	12·7
Marton-in-Cleveland (Southcroft)	3·26	12·9	*Durham.*		
Middlesbrough (Albert Park)	2·47	10·3	Sunderland (W. Hendon H.)	2·18	8·5

The circumstances of the falls of 21st June were similar to those of 9th June.

June 21st.

Merioneth.	*in.*	or %	*Merioneth.*	*in.*	or %
Blaenau Festiniog (Oakeley Q.)	*3·60*	*2·5*	Blaenau Festiniog (Llechwedd Q.)	*3·70*	*2·5*

The heavy falls of 28th June gave the highest measurements for any day in 1928, the values exceeding 7 inches in the Snowdon area, 4 inches in the Lake District and 3 inches around Sedbergh in Yorkshire. A map of the distribution of rainfall on this day is reproduced.



Rainfall, 28th June, 1928.

The falls over Ireland and Scotland were not remarkable; at several stations in the Highlands of Scotland no rain fell. The map shows a line of zero rainfall extending from the Bristol Channel to Scarborough. The day was rainless to the S.E. of this line.

The heavy falls were obviously due in considerable measure to the high ground from which they are exclusively reported, but the fact that there was no rain in parts of Scotland is less easy to explain.

The weather map showed a considerable depression out on the Atlantic to the south-west of Iceland on the morning of the 28th. This moved slowly east and was centred between Ireland and Iceland on the morning of the 29th. Throughout the whole period the British Isles were under the influence of the depression and in the region of isobars running from S.W. to N.E. The pressure gradient was moderate to steep. An extensive high pressure system lay over France.

It would appear that the air which supplied the S.W. winds over the British Isles was derived from two separate sources : (*a*) a relatively cool current from the Northern Atlantic, and (*b*) a rather warmer current from the Southern Atlantic. These two currents were eventually brought side by side over the area of heavy rain. It is probable that the cooler current spread sideways under the warmer and moister current, and that the latter was raised steadily and continuously throughout the day, with the result that steady and continuous rain was produced at the confluence of the currents. The process was assisted considerably by the strong winds and the mountainous nature of the country from which the heaviest falls were reported. The junction of the two currents was apparently too far south of Scotland to produce similar effects there.

June 28th.

Yorkshire.	*in.*	or %
Sedbergh (Brigg Flat) ..	3·05	3·9
Sedbergh (Havera Bank) ..	2·96	3·6
Slaidburn (Thorneyholme)	2·88	3·7
Slaidburn (Dunsop Houses)	2·92	3·2
Slaidburn (Footholme) ..	*2·62*	*3·0*
Slaidburn (Brennand) ..	*2·94*	*3·2*
Slaidburn (Whitendale) ..	2·73	3·0
Oughtershaw Hall.. ..	2·76	3·0
Cumberland.		
Rosthwaite (The Moraine)	4·34	3·1
Buttermere (Hassness) ..	4·68	3·3
Westmorland.		
Grasmere (The Wray) ..	3·10	2·3
Killington Reservoir ..	*3·05*	*4·2*
Kendal (Vicarage Terrace)	*2·55*	*3·3*
Kendal (Highgate) ..	*2·63*	*3·2*
Kendal (Greenside) ..	*2·86*	*3·3*
Kendal (Burnside).. ..	2·80	3·3
Kendal (Potter Fell) ..	3·33	2·7
Barbon Manor	2·75	4·0
Barbon (The Stores) ..	2·72	3·9
Denbigh.		
Pentre Voelas (Voelas Hall)	2·54	3·6

Merioneth.	*in.*	or %
Llanuwchllyn	2·63	3·3
Tan-y-bwlch (Plas Gardens)	2·98	3·8
Festiniog (Hafod Fawr) ..	4·02	4·0
Blaenau Festiniog (Oakeley Q.)	7·77	5·3
Blaenau Festiniog (Llechwedd Q.)	7·75	5·3
Tal-y-llyn Rectory ..	3·30	3·5
Dolgelly (Dol'rhyd) ..	2·75	3·9
Dolgelly (Bryntirion) ..	2·73	3·7
Trawsfynydd Camp ..	2·51	3·0
Carnarvon.		
Bettws Garmon	*2·75*	*3·4*
Bethesda (St. Ann's Vicarage)	2·81	3·8
Bethesda (Penrhyn Quarries)	2·70	3·3
Beddgelert (Co. School) ..	5·16	4·3
Snowdon (Cwm Dyli) 11	6·47	4·0
Snowdon (Llydaw Intake) 10	6·85	3·9
Snowdon (L. Llydaw Copper Mine) 9	7·25	4·0

JULY.—On the whole, July was a dry month, but there were four days on which heavy falls occurred, and on each occasion these falls were reported only from high-level stations, showing that the causes of the rain were partly orographic.

The falls of 1st and 4th July occurred in the south-eastern portions of depressions advancing from the Atlantic, where the S.W. winds were moderate or strong. The falls were steady and continuous as a rule.

July 1st.

Cumberland.	*in.*	or %
Rosthwaite (The Moraine)	*3·05*	*2·2*
Buttermere (Hassness) ..	*2·59*	*1·8*
Westmorland.		
Bowness (Dawstone) ..	2·58	2·6

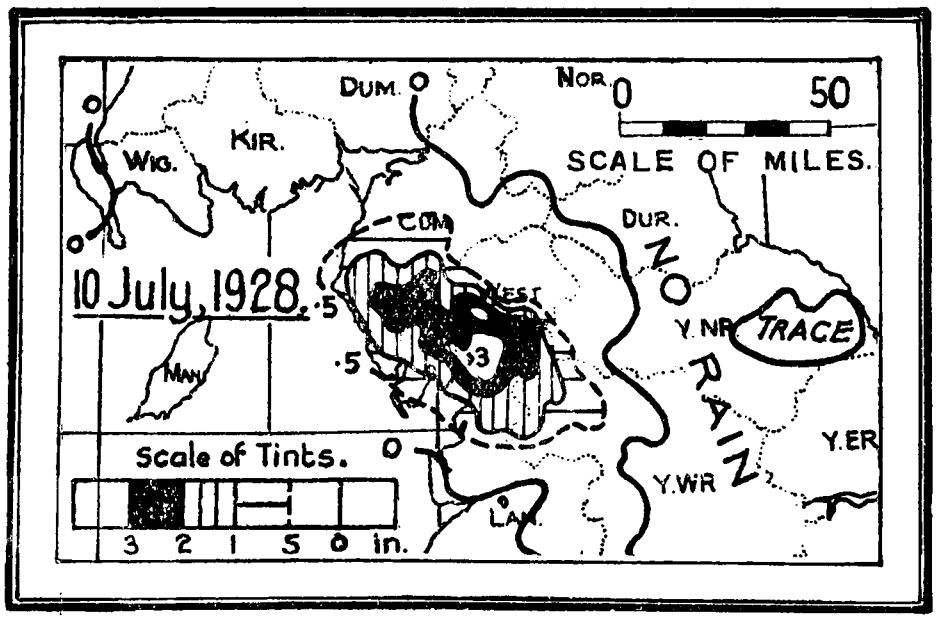
Westmorland.	*in.*	or %
Grasmere (The Wray) ..	*3·07*	*2·2*
Merioneth.		
Blaenau Festiniog (Llechwedd Q.)	*2·82*	*1·9*

July 4th.

Yorkshire.	*in.*	or %
Walsden (Warland Res.) ..	2·53	3·5
Merioneth.		
Blaenau Festiniog (Oakeley Q.)	*4·58*	*3·1*
Blaenau Festiniog (Llechwedd Q.)	*5·12*	*3·5*

Merioneth.	*in.*	or %
Tal-y-llyn Rectory ..	*2·95*	*3·2*
Carnarvon.		
Bettws Garmon	3·19	3·9
Beddgelert (Co. School) ..	*3·52*	*2·9*
Clare.		
Inagh (Mt. Callan) ..	2·75	3·5

The origin of the falls of 10th July was very similar to those just described, but the distribution of the rainfall is worthy of note and is



Rainfall, 10th July, 1928.

shown in the above map. More than 3 inches of rain fell in the Lake District, but at stations east of the Pennine Range, no rain or, at most, only a trace fell. The rain in Scotland was considerable in parts but not heavy enough to be mentioned here, while in Wales practically none fell. The heavy fall over North England may have been due to

a secondary depression which did not extend so far south as Wales, while the absence of rain to the east of the Pennines was probably a "rain-shadow" effect; i.e., after it had passed the mountains there was not sufficient moisture and energy in the secondary depression to produce rain on the low ground.

July 10th.

Lancashire.	*in.*	or %
Hawkshead (Tower Bank Sawrey)	2·60	2·6
Hawkshead (Bettyfold) ..	3·00	2·7
Yealand Conyers (Beechfield)	3·26	5·6
Yealand Conyers (Morecambe Lo.)	3·00	4·8
Lindale (Ellerhow) ..	2·66	3·4
Cartmel Fell (The Schoolhouse)	3·25	3·7
Westmorland.		
Burton (Under Fell) ..	3·94	6·2
Heversham (Plumtree Hall)	3·15	4·5
Grange-over-Sands (Witherslack)	2·87	3·9
Killington Reservoir ..	3·38	4·7

Westmorland.	*in.*	or %
Kendal (Vicarage Terrace)	3·14	4·0
Kendal (Highgate) ..	2·87	3·5
Kendal (Greenside) ..	3·08	3·6
Kendal (Ellergreen) ..	2·68	3·1
Kendal (Burnside).. ..	*2·66*	*3·2*
Kendal (Potter Fell) ..	*3·07*	*2·5*
Dumbarton.		
Glen Finlas Reservoir 7 ..	2·72	2·3
Argyll.		
Ardgour House	2·54	2·2
Mull (Lochbuie House) ..	2·60	2·5
Inverness.		
Loch Quoich (Kinloch-quoich)	*3·08*	*2·4*
Ross & Cromarty.		
Glenshiel (Ratagan) ..	2·50	2·5

The heavy falls of 26th July were associated with the passage of a small depression across Ireland to the Lowlands of Scotland.

July 26th.

Cumberland.	*in.*	or %
Rosthwaite (The Moraine)	*2·50*	*1·8*
Buttermere (Hassness) ..	*3·22*	*2·2*

Cumberland.	*in.*	or %
Keswick (Derwent Island)	2·50	3·1
Bassenthwaite (Higham) ..	2·63	4·6

AUGUST.—The isolated heavy falls of 6th and 11th were associated with depressions to the west of Ireland.

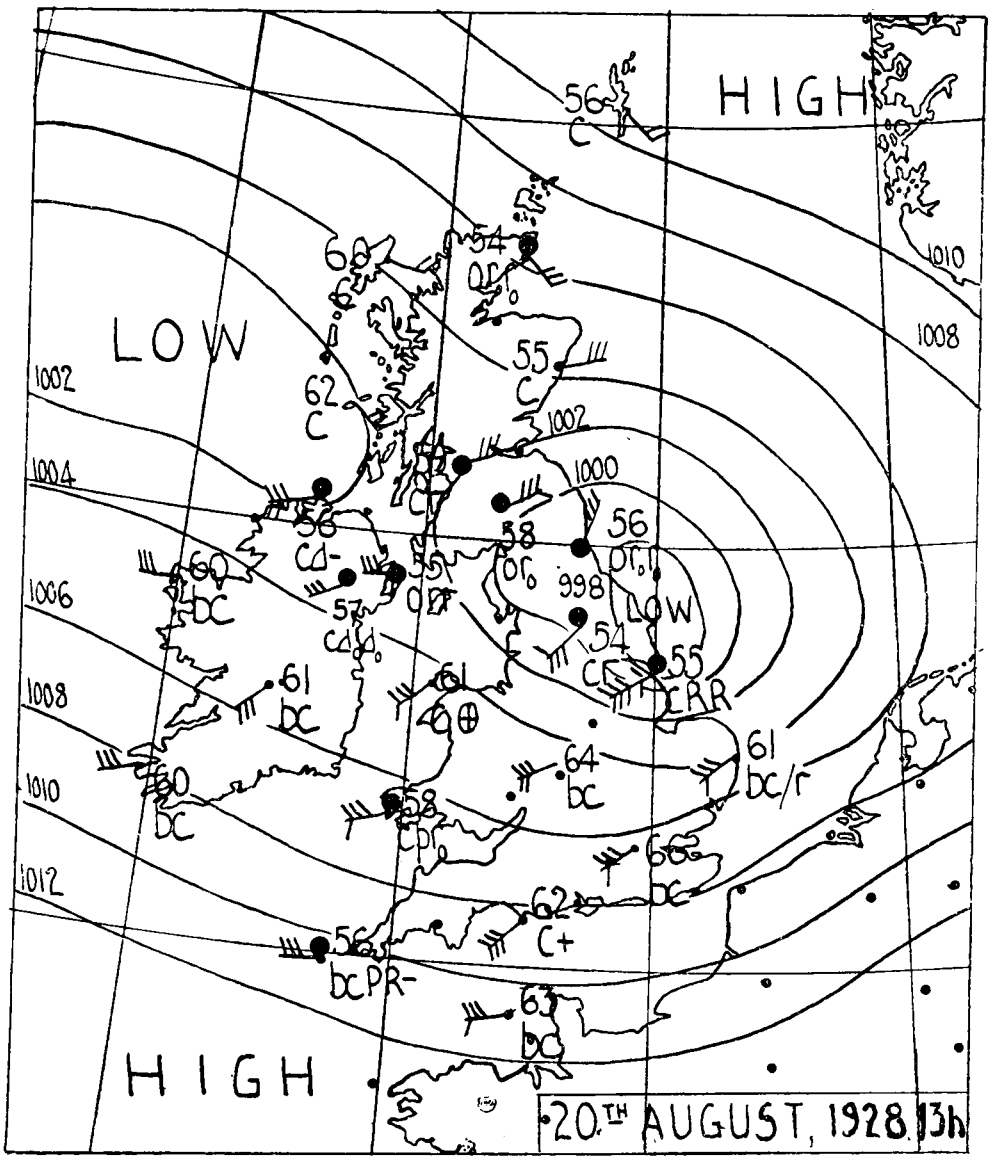
August 6th.

Kerry.—Kilgarvan (Inchimore) ..... *3·50 in.* or *2·4* per cent.

August 11th.

Dumfries.—Eaglesfield (Springkeld Gdns.) ..... 3·15 *in.* or 4·9 per cent.

A large area received considerable amounts of rain on 20th August, the distribution being shown on the map on p. 66. The occasion is remarkable in that it provides the best example in 1928 of heavy falls in a non-mountainous area. As a rule, such falls on low-lying ground are due to thunderstorms; but, although isolated thunderstorms were reported in southern England on this occasion they apparently did not occur in the area of heaviest rain. The rainfall map indicates that there were areas free from rain both to the north and south of the rain area.



Synoptic Chart, 20th August, 1928, 13 h.

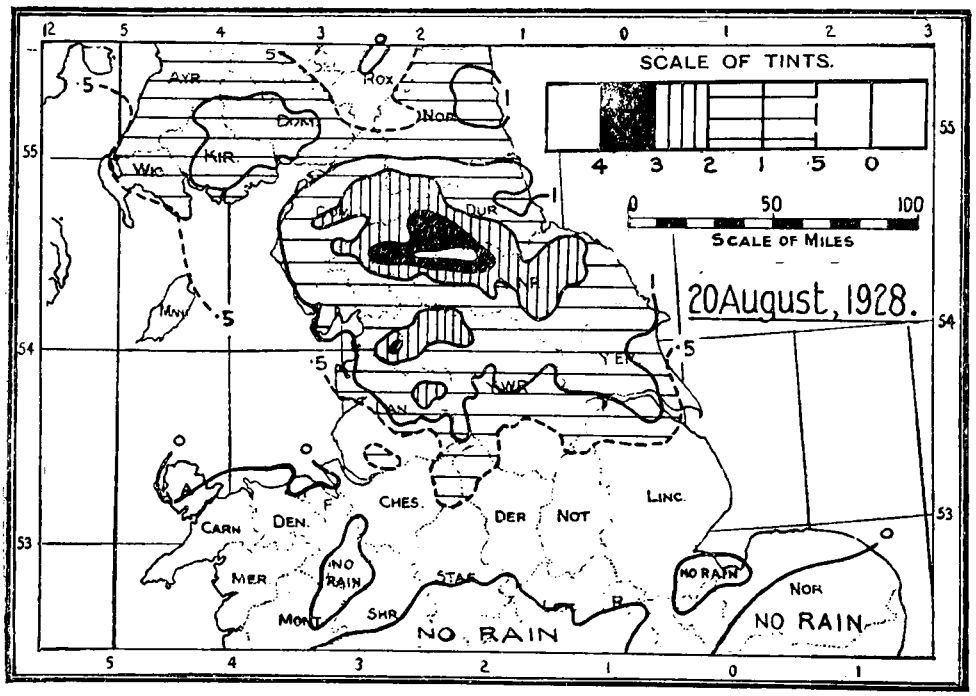
BAROMETER.—Isobars are drawn for intervals of 2 millibars, 1,000 millibars = 29·53 mercury inches.
WIND.—Direction is showing by arrows flying with the wind. Force, on the scale 0 to 12, is indicated by the number of feathers. A circle indicates calm.
TEMPERATURE is given by figures in degrees Fahrenheit.
WEATHER is indicated by the following notation:—
b, blue sky; bc, sky partly clouded; c, generally cloudy; o, overcast sky; p, passing showers; r, rain; d, drizzle. Capital letters indicate "intense"; suffix ₀ indicates "slight"; repetition of letters indicates continuity. ● = rain.

A weather map corresponding with observations made at 13h. G.M.T. on 20th August is reproduced; this suggests that the cause of the heavy rain was the convergence of air from the two sides of a well-marked trough of low pressure extending across the wet area.

August 20th.

Lancashire.	*in.*	or %
Huncoat (Burnley Road Res.)	2·72	4·4
Yorkshire.		
Slaidburn (Brennand) ..	3·15	3·4
Barden Reservoir	2·52	4·8
Coxwold (The Old Hall) ..	2·50	8·5
Thirsk (Brynkellow) ..	2·98	12·0
Felixkirk (Mt. St. John) ..	2·59	9·1
Boltby (Ravensthorpe Manor)	2·91	10·0
Maunby Hall	2·48	10·5
Northallerton (Brompton)	2·63	9·9
East Harlsey (Harlsey Hall)	2·54	10·8
Guisborough (Lockwood Res.)	2·50	7·1

Yorkshire.	*in.*	or %
Kildale Hall	2·82	7·8
Barningham Park	4·31	9·7
Nunthorpe (The Box) ..	1·96	7·5
Durham.		
Barnard Castle (Bowes Museum)	3·30	8·5
Middleton-in-Teesdale (Newbiggin)	2·69	4·8
Burnhope Bridge	2·99	4·6
Westmorland.		
Kirkby Stephen (Redman Ho.)	4·35	7·2
Stainmore (Rampson) ..	3·18	6·5
Appleby (Castle Bank) ..	2·87	5·5



Rainfall, 20th August, 1928.

SEPTEMBER.—Only one isolated measurement of a heavy fall occurred in September, viz., at Buttermere on the 3rd. This was due to a small secondary depression which passed to the north of the Lake District.

September 3rd.

Cumberland.—Buttermere (Hassness) ..... *2·80 in.* or *1·9* **per cent.**

OCTOBER.—The heavy falls of this month occurred on six days, but none of them was widespread in distribution.

The falls of 7th October were associated with a depression to the west of the British Isles and were largely orographic in character.

October 7th.

Cumberland.	*in.*	or %	*Kerry.*	*in.*	or %
Rosthwaite (The Moraine)	*2·50*	*1·8*	Kilgarvan (Inchimore) ..	*3·00*	*2·0*
Buttermere (Hassness) ..	*3·00*	*2·1*			

The heavy rains entered to 10th October probably fell, for the most part, on the early morning of the 11th, and were due to the rapid development of a V-shaped depression of which the axis at 7h. on 11th October lay on a line from the Straits of Dover to the Connemara mountains. The fall at Fort William on the 11th was due to the same cause. It is very probable that if the rainfalls of the two days were added together at all stations, the result would give a truer picture of the rain associated with this V-shaped depression and that many more stations would be seen to be affected by the heavy rain.

October 10th.

Northamptonshire.	*in.*	or %	*Down.*	*in.*	or %
Gretton School	2·37	9·4	Mourne Mount'ns (Fofanny Res.)	*3·30*	*3·2*

October 11th.

Wigtown.—Fort William (Monreith)..... 2·54 *in.* or 4·5 per cent.

The falls of 18th October fell in violent squalls which accompanied the passage of a depression eastwards to the north of Scotland.

October 18th.

Inverness.	*in.*	or %	*Inverness.*	*in.*	or %
Loch Quoich (Kinloch-quoich)	*3·00*	*2·3*	Glendessary	2·50	2·0

The falls of 19th October were due to a new depression which approached from the west of Ireland, of which the centre moved rapidly north-east to the north of Scotland.

October 19th.

Bute.—Corrie Manse ..... 2·53 *in.* or 2·5 per cent.

The falls in Hampshire and Sussex on 26th October can be attributed to secondaries to a depression off N.W. Ireland.

October 26th.

Hants.	*in.*	or %	*Sussex.*	***in.***	**or %**
West Tisted Manor ..	2·58	6·3	Harting (Down Place) ..	2·54	5·5

NOVEMBER.—The heavy falls on rainfall days in this month occurred exclusively in mountainous regions and in stormy weather, indicating the action of orographic effects in increasing the falls. All the falls were associated with deep depressions of which the centres passed eastwards in the region between Iceland and Scotland.

November 11th.

Merioneth.	*in.*	or %	*Carnarvon.*	*in.*	or %
Blaenau Festiniog (Llechwedd Q.)	*4·05*	*2·8*	Snowdon (Cwm Dyli) 11	*3·31*	*2·1*

November 12th.

Glamorgan.	*in.*	or %	*Glamorgan.*	*in.*	or %
Glyncorrwg Colliery ..	*2·85*	*2·6*	Rhondda (Pont Lluest Wen R.) 2	*2·70*	*2·6*
Treherbert (Tyn-y-waun)..	*2·58*	*2·1*	Rhondda (Pont Lluest Wen R.) 1	*3·05*	*2·4*

November 14th.

Westmorland.	*in.*	or %	*Westmorland.*	*in.*	or %
Rydal	2·80	2·2	Rydal (The Hall)	2·78	2·2
Rydal (High Close) ..	2·90	2·3	Grasmere (The Wray) ..	*3·00*	*2·2*

November 18th.

Carnarvon.	*in.*	or %	*Kerry.*	*in.*	or %
Snowdon (Llydaw Intake) 10	*2·55*	*1·4*	Kilgarvan (Inchimore) ..	*2·58*	*1·7*

November 22nd.

Glamorgan.	*in.*	or %	*Carnarvon.*	*in.*	or %
Glyncorrwg Colliery ..	2·92	2·7	Snowdon (Cwm Dyli) 11	*3·29*	*2·1*
Rhondda (Pont Lluest Wen R.) 1	*3·21*	*2·6*	Snowdon (Llydaw Intake) 10	*2·80*	*1·6*
Merioneth.					
Blaenau Festiniog (Oakeley Q.)	*3·35*	*2·3*	Snowdon (L. Llydaw Copper M.) 9	*2·93*	*1·6*
Blaenau Festiniog (Llechwedd Q.)	*3·10*	*2·1*			

November 23rd.

Lancashire.	*in.*	or %	*Westmorland.*	*in.*	or %
Coniston (School Garden)..	3·06	2·9	Rydal	*2·59*	*2·1*
Westmorland.			Rydal (The Hall)	*2·56*	*2·0*
Rydal (The Stepping Stones)	2·51	2·0	Grasmere (The Wray) ..	*2·54*	*1·9*

DECEMBER.—The heavy falls in Devonshire on 10th December were due to the rapid development of a vigorous secondary depression near the mouth of the Channel.

December 10th.

Devon.	*in.*	or %	*Devon.*	*in.*	or %
Princetown (Wydemeet) ..	2·75	3·7	Bovey Tracey (Hedgebarton)	2·70	3·8

The falls of 15th December occurred at the confluence of southerly winds of continental and oceanic origins, the oceanic current being about 10° F. warmer than the continental current. The warm current was very damp, and it was associated with the approach of a depression from west of Ireland. Most of that part of Ireland, south of a line between the mouth of the Shannon and the northern part of the Wicklow mountains received more than an inch of rain on this occasion.

December 15th.

Kerry.	*in.*	or %	*Down.*	*in.*	or %
Kilgarvan (Inchimore) ..	4·00	2·7	Mourne Mountains (Fofanny Res.)	5·45	5·3

The heavy falls of 25th December in the Lake District and South Wales were associated with a deep depression which moved rapidly across the north of Scotland. The orographic effect is apparent on the rainfall map which is not, however, reproduced.

December 25th.

Cumberland.	*in.*	or %	*Glamorgan.*	*in.*	or %
Rosthwaite (The Moraine)	*2·55*	*1·8*	Rhondda (Pont Lluest Wen R.) 2	3·18	3·0
Glamorgan.			Rhondda (Pont Lluest Wen R.) 1	4·11	3·3
Treherbert (Tyn-y-waun)..	3·24	2·7			
Rhondda (Pont Lluest Wen R.) 3	2·64	2·6			

8. MONTHLY RAINFALL IN 1928.

Information as to the rainfall of the months of 1928 is set out in this section in various forms :—

(1) Table XIX gives generalized values of the monthly and annual rainfall over the British Isles as a whole and also over the constituent countries separately.

(2) On pp. 72–73 details are given of some of the largest and smallest monthly totals of rainfall reported during 1928.

(3) In Table XX the monthly and annual totals of rainfall are set out for 400 stations, distributed evenly over the British Isles.

(4) Table XXI gives the monthly and annual falls expressed as percentages of the averages for 1881 to 1915. It is confined to 150 stations, uniformly distributed over the British Isles, for which averages are available. At the end of this table, general monthly and annual percentage values are given for the British Isles and for each of the constituent countries.

(5) A set of twelve maps showing the distribution of the actual rainfall in each month, is reproduced in this article. A thirteenth map on a larger scale depicting the distribution of rainfall for the whole year is also reproduced. These maps were originally drawn on the much larger scale of 19 miles to the inch, and values from about 4000 separate stations were plotted on each map before the isohyetal lines were drawn. Details which would tend to confuse the maps on the small scale of the reproductions have been eliminated.

(6) A second set of twelve maps showing cartographically the distribution of the percentage monthly values given in Table XXI and in the rainfall table published month by month in the *Meteorological Magazine* is also reproduced in this article. The corresponding percentage map for the whole year appears later in Section 10.

General Monthly Rainfall.

The general monthly values given in Table XIX have been computed by applying the percentage values given at the end of Table XXI to the average general values for the period 1881 to 1915. These computed values have been subsequently slightly adjusted in

order that the totals for the year should agree with the totals given in Table XXIII which are based on a more exact determination as explained in the text accompanying that table.

Table XIX.—*General Rainfall for* 1928, *computed from the average,* 1881–1915, *by applying the general Percentage values given in Tables XXI and XXIII to the General Average Values.*

	England.	Wales.	England and Wales.	Isle of Man.	Scotland.	Ireland.	British Isles.
	in.	in.	in.	in.	in.	in.	in.
January	5·8	9·5	6·4	8·1	10·5	6·9	7·6
February	2·6	5·9	3·0	3·8	5·0	4·7	3·9
March	2·9	4·0	3·1	4·2	4·9	4·9	4·0
April	1·6	1·8	1·7	1·7	2·1	2·7	2·0
May	1·7	1·2	1·6	1·5	2·0	1·6	1·7
June	3·5	5·4	3·8	6·9	5·1	5·5	4·4
July	2·1	3·0	2·2	3·2	3·5	2·1	2·5
August	3·3	4·9	3·6	5·5	5·2	5·6	4·4
September ..	1·1	1·8	1·2	2·6	4·2	3·0	2·3
October	5·2	8·1	5·6	8·9	6·9	6·7	6·2
November	4·0	8·5	4·6	8·0	7·1	6·0	5·6
December	3·2	5·5	3·6	4·4	5·5	4·7	4·4
Year	37·0	59·6	40·4	58·8	62·0	54·4	49·0

It is shown in Table XIX that the general monthly rainfall over the British Isles as a whole, varied from 1·7 inches in May to 7·6 inches in January. May was also the driest month of the year in 1927 but in the four previous years the month had been a wet one. The rainfall reached or exceeded 4 inches in as many as 7 months. This is unusual, although it was equalled in 1924. While the least value in Table XIX for England, is that for September, May was the driest month in Wales, Scotland and Ireland. January gave most rain in each country.

The corresponding general monthly percentage values are given at the end of Table XXI. Over the British Isles as a whole, January received rather more than twice the average, while during April, May, July and September, the rainfall was only about three-quarters of the average of those months. Thus four of the six summer months were unusually dry, and apart from December, when there was a small deficiency, dry months were confined to the summer. The run of wet Januaries which commenced in 1918 and continued with only one break, (viz., 1923 with 97 per cent.,) culminated in that of 1928 with 203 per cent. January, 1928, was the wettest January in the last 60 years, the next wettest being those of 1877 and 1872 with 192 and 181 per cent., respectively. April, 1928, was the first April

in the last 7 years with less than the average amount. December, 1928, was the fourth consecutive dry December. March, 1928, was the wettest March since that of 1920. June, 1928, was the wettest June since that of 1912, and October, 1928, was the wettest October since that of 1916. April and September; 1928, were the driest April and September since those of 1921, while May and July, 1928, were the driest May and July since those of 1919. The values for England and Wales and Scotland for January are the largest on record since comparable statistics first became available in 1870, but the value for Ireland has been exceeded in January on five occasions, including January, 1926. The rainfall of September over England and Wales was just less than half the average. Over Scotland generally none of the last 11 Januaries received less than the average and each of the last 6 Septembers exceeded the average. June was particularly wet in both Scotland and Ireland where the rainfall was nearly twice the average. In Ireland June with 193 per cent., gave the largest monthly percentage value while January and October recorded 169 and 165 per cent., respectively.

Extremes of Monthly Rainfall at Individual Stations.

(*a*) *Monthly Totals.*—More than 30 inches were recorded in both January and November in part of the English Lake District and in January on Snowdon. As much as 34 inches were recorded at Sprinkling Tarn and Stye Head in Cumberland during November. The rainfall of January in this region was even more remarkable, although no actual readings are available, owing to the water in the gauges being frozen on January 1st, 1928. At Seathwaite 36·22 inches was recorded from January 1st to February 3rd giving an estimated total for January of 35 inches. It is computed that as much as 50 inches probably fell at The Stye during January. The actual largest monthly values on record are set out below :—

STATION.	COUNTY.	MONTH.	AMOUNT.
Llyn Llydaw No. 9 ..	Carnarvon ..	October, 1909	56·54 ins.
Borrowdale, The Stye ..	Cumberland ..	January, 1872	50·05 ,,
Ben Nevis Observatory ..	Inverness ..	December, 1900	48·34 ,,

This can be taken as a general confirmation of the estimate for January, 1928 at The Stye, for at other stations in the Lake District the month was the wettest January on record. Records are available at Seathwaite back to 1845 and the largest amount previously recorded in January was 32·14 inches in 1872. January, 1928, was therefore easily the wettest January on record at that station.

January, 1928, was the wettest month in records covering 135 years at Manchester, 97 years at Bolton, 81 years at Stonyhurst and 57 years at Southport. There was 20 inches or more on Snowdon during each of the 5 months, January, February, June, October and November, and at The Stye during 6 months, July also giving this amount.

The record at Inchimore to the south of Kilgarvan (in the Caha Mountains near the boundary of Cork and Kerry) gave the largest monthly total for Ireland of 22·59 inches for January.

On the other hand, the smallest monthly totals in the British Isles occurred in April, May, July and September. There was about ·4 inch in eastern Aberdeenshire during February, while less than half-an-inch was recorded in April over a small area to the east of the Pennines near Bedale ; in May near Birmingham, in July near Bedale, and from Leeds to Hull; and in September along the south-east coast of Kent, in the neighbourhood of the Thames Estuary, and over a large area stretching from the east coast from the Wash to Hull and as far inland as the Pennines. At Wednesbury (Staffordshire) ·17 inch was recorded in May, while at Shoeburyness (Essex) and Retford (Nottinghamshire) ·18 inch and at Rotherham ·17 inch was recorded during September.

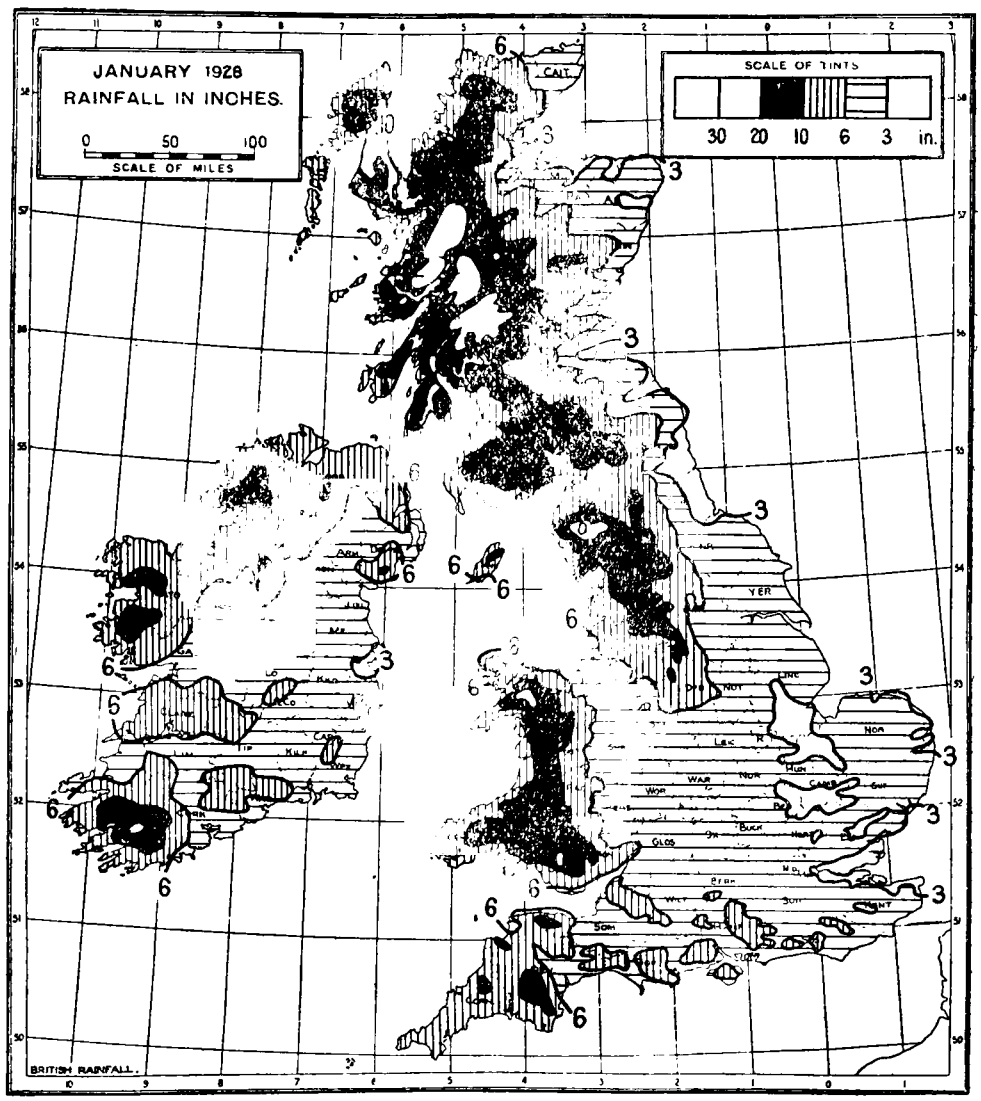
(*b*) *Extremes of Monthly Percentage Values.*—Monthly totals of more than three times the average were recorded in January in south-eastern Lancashire and locally in the south of Scotland, and in March in the south-east of Ireland. At Courtown House, near Gorey, in Co. Wexford the total for March was 370 per cent. of the average and at Stobo Castle (Peebleshire) the total for January was 346 per cent. of the average for that month.

On the other hand values of less than 25 per cent. were found in May in South Wales, part of Staffordshire, the English Lake District, and the Western Highlands of Scotland, in July near the mouth of the Humber, and in September in part of Sussex and over a large area between the Humber and the Wash. The smallest percentage value for May was that of 12 per cent. at Glyncorrwg Colliery in Glamorgan and for September of 11 per cent. at Rotherham (with ·17 inch).

The Rainfall and Weather of the Individual Months.

*** Maps showing the distribution of mean pressure and the movements of the centres of depressions for each month are published in the *Monthly Weather Report*.

January was mild and stormy, with persistent and heavy rains, associated with the passage across or near the British Isles of an abnormally large number of depressions. The monthly means of



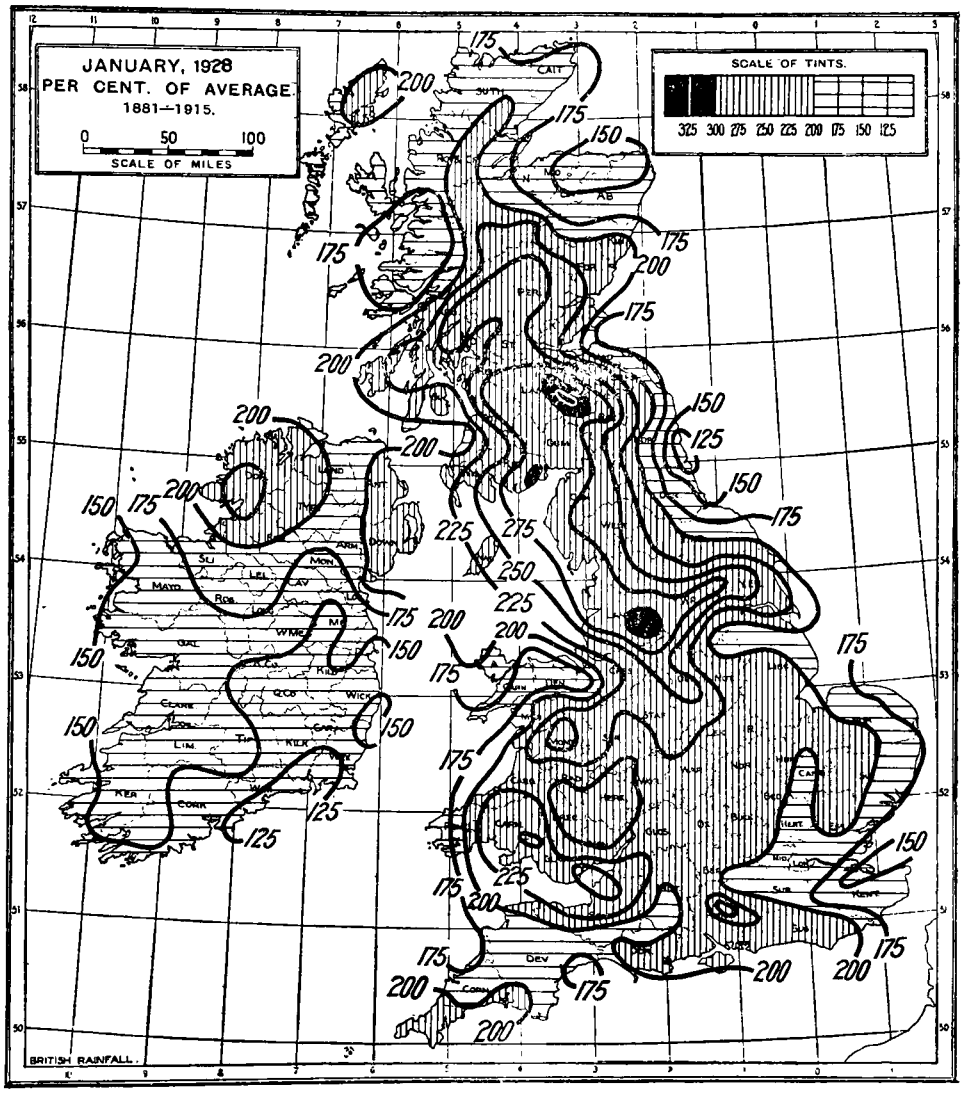
Rainfall, January, 1928.

pressure were everywhere below the average, the deficiency ranging from 13 millibars at Stornoway to 2 millibars at Scilly. The prevailing winds were south-westerly and high winds and gales occurred frequently during the month, the gales on the 6th, about the 10th and on the 24th and 25th being notably severe in northern districts.

The rainfall totals for the month were everywhere in excess of the average, and over the country generally January, 1928, was the wettest January on record. The general number of days of rain was

27, or 4 more than in the fairly wet January of 1927 and 8 more than the average.

The totals exceeded twice the average over northern Ireland and the greater part of Great Britain. Falls exceeding three times the average were recorded at Manchester and in parts of southern Scotland. The largest percentage values given in Table XXI are 346 at Stobo Castle (Peebleshire), 322 at Torr House (Kirkcudbrightshire) and 306 at Manchester. Owing to the melting of the snow at the beginning of

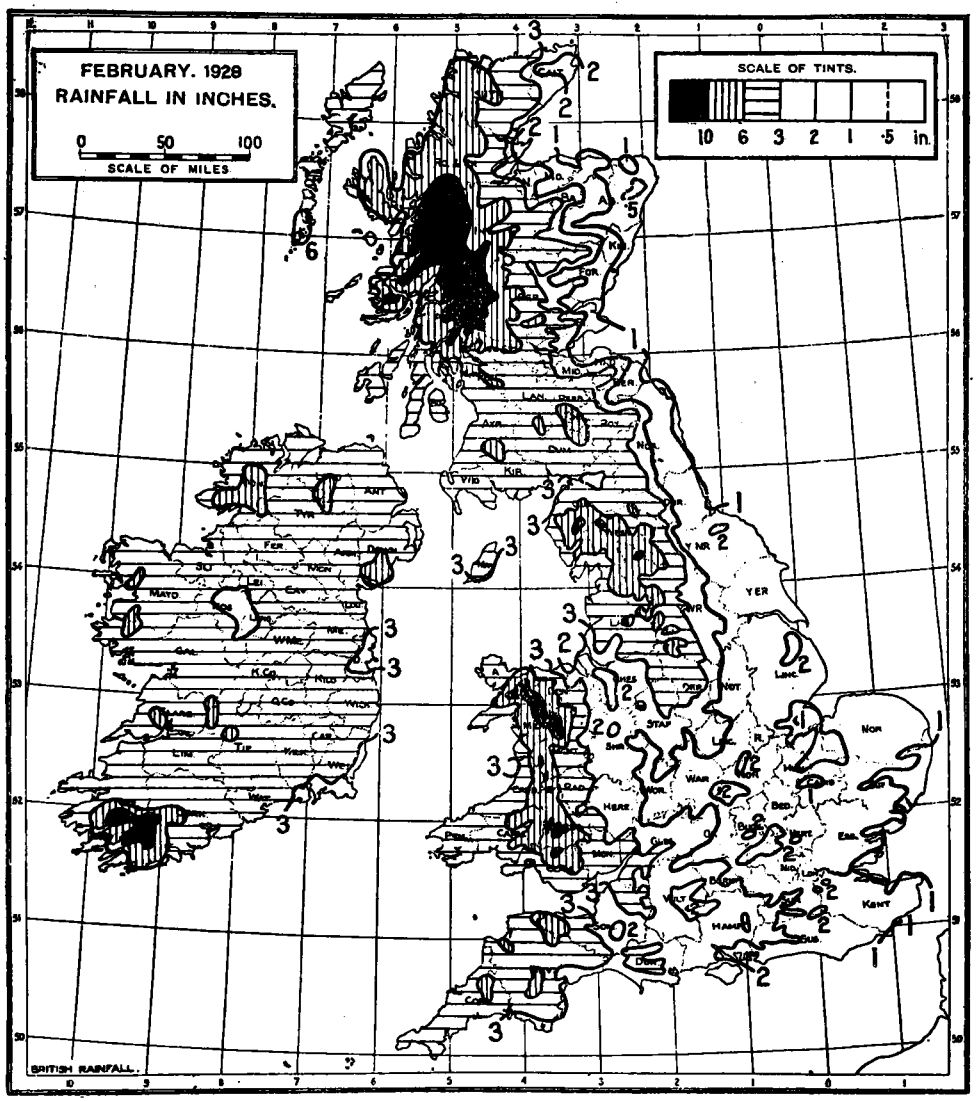


Rainfall, January, 1928, as per cent. of average.

the month and the subsequent frequent rains, much flooding occurred in many districts; in Scotland, serious damage was caused by floods about the 22nd, notably in the Blairgowrie district and at Ballater, where the Dee burst its banks. In the early part of the month flooding was widespread in the Thames Valley.

The map of actual rainfall indicates large areas with more than 20 inches in Snowdonia, the English Lake District and the Western Highlands of Scotland.

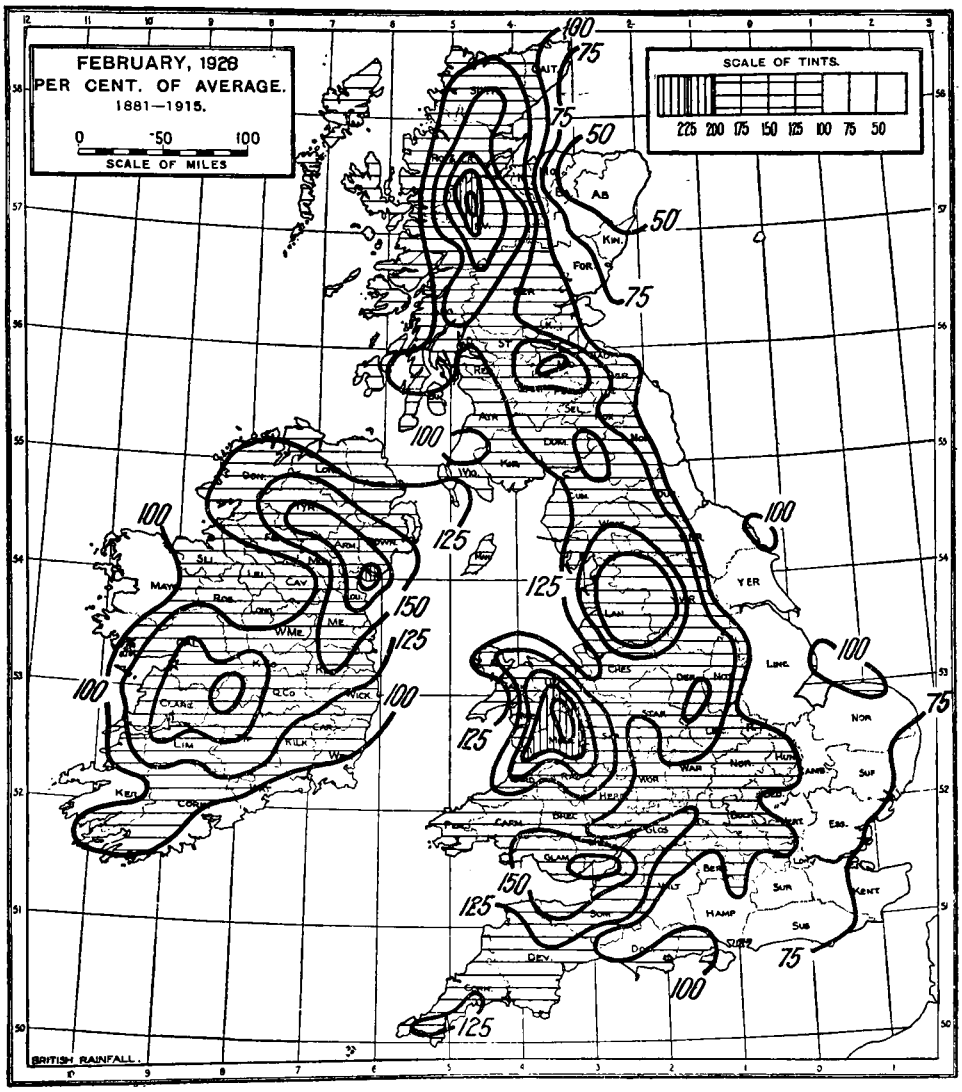
During the first half of **February** mild unsettled weather continued with frequent precipitation and severe gales on the 10th to 11th, but the second half of the month was relatively dry and sunny. The tracks of the main depressions lay between Iceland and the north of Scotland, and while monthly means of pressure were below the average in the north of Scotland they were considerably above it in the south of England. The prevailing winds were westerly.



Rainfall, February, 1928.

The rainfall exceeded twice the average in Co. Louth, the Western Highlands of Scotland and in the northern half of Central Wales. The largest percentage values given in Table XXI are 230 at Fort Augustus, Inverness-shire, 229 at Lake Vyrnwy, Montgomeryshire and 215 at Greenore, Co. Louth. At the eastern end of Lake Vyrnwy the total was 10·21 inches, which is 5·75 inches in excess of the average.

There was a broad strip along the east of Great Britain with less than the average as well as along the west and south coasts of Ireland. Over most of Aberdeenshire there was less than half the average amount. The rainfall gradient from west to east was more marked than usual, the totals varying from ·6 inch along the east coast of Aberdeen to 17 inches at Loch Quoich. This is a normal feature of those months



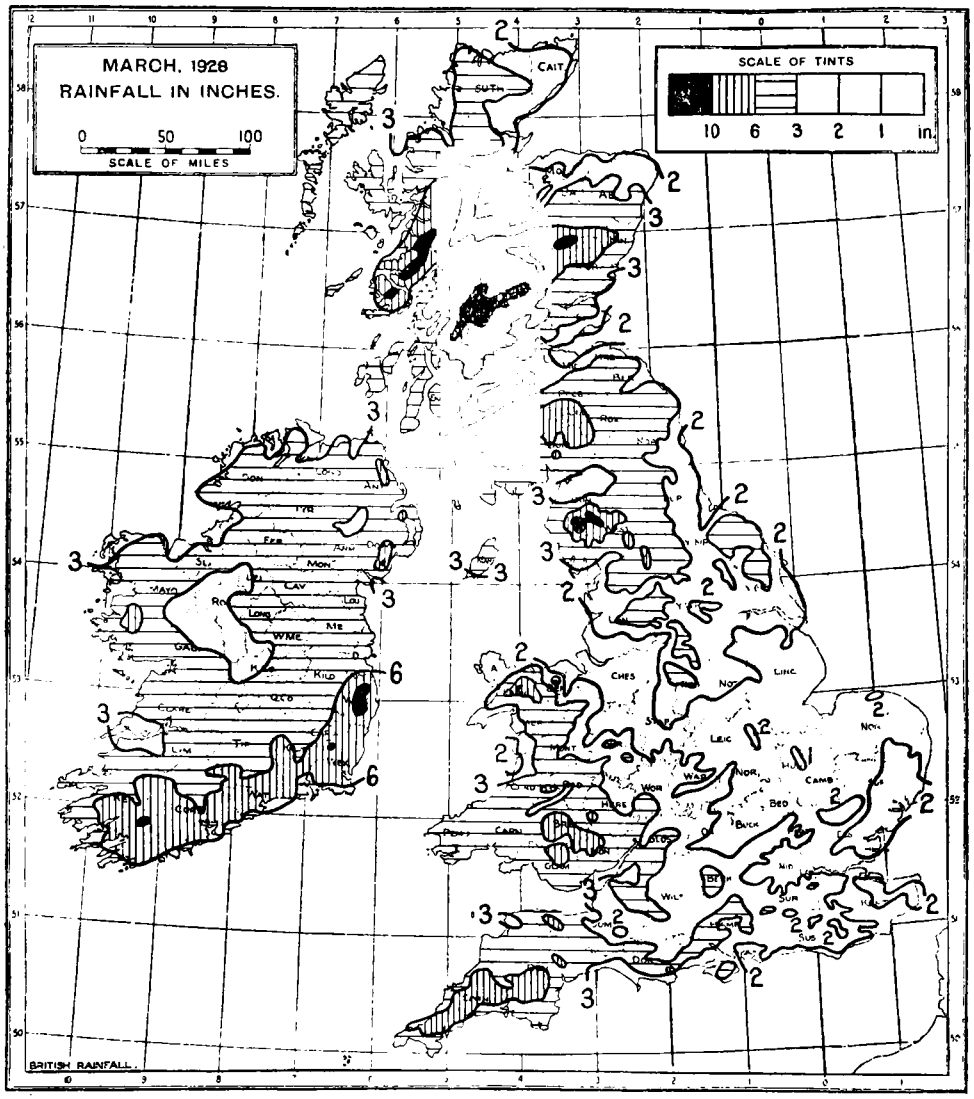
Rainfall, February, 1928, as per cent. of average.

in which there is an increased pressure gradient from south to north and consequently pronounced south-westerly winds.

In Scotland many rivers were in flood on the 4th and later days, and on the 9th flooding in the Spey Valley was extensive, the river bursting its banks at Garmouth. The observer at Southport reported the greatest flooding for over 50 years.

March was on the whole wet and mild, but there was a notable spell of cold weather extending from about the 8th to the 13th.

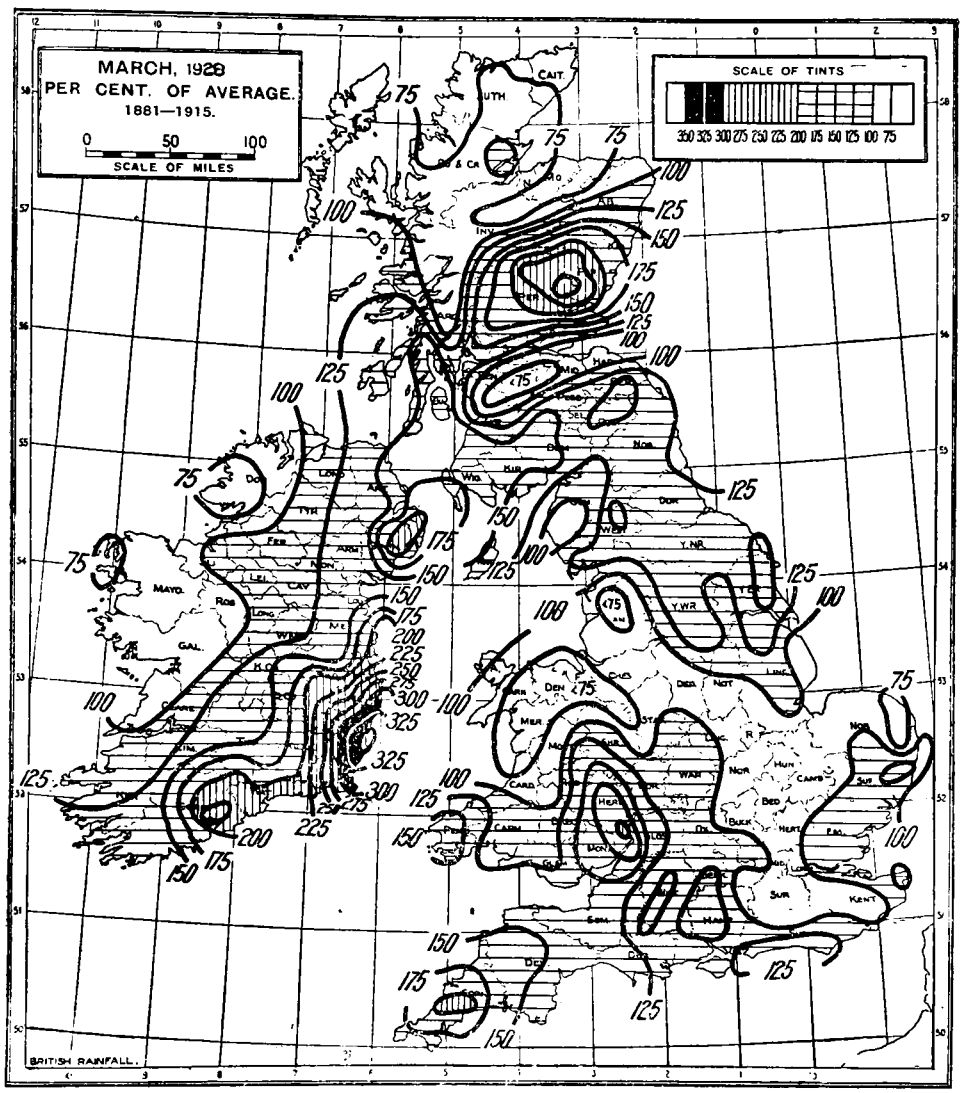
The general trend of the isobars of mean pressure differed considerably from the normal, the pressure decreasing from east to west instead of from north to south. The pressure was lowest over Galway. Over a wide belt, stretching from Co. Cork and Cornwall in



Rainfall, March, 1928.

the south-west to Aberdeen and Dundee, falls of more than twice the average for the month were common. There was more than three times the average in the south-east of Ireland, as much as 8·56 inches or 370 per cent. of the average being recorded at Courtown House on the coast of Wexford. This was the wettest March on record at this station, the previous largest total in March being 5·41 in 1867. So large a monthly total was only recorded at Courtown House in

October, 1875, and in the Decembers of 1876, 1911 and 1914 and in August, 1917, when the totals were 8·72, 8·64, 9·35, 8·58 and 8·87 inches respectively. The total for the 10 days, the 14th to 23rd, 1928, was as much as 6·20 inches, the largest daily amount being 1·33 inch on the 16th. At Dundee the rainfall was fairly uniformly distributed, but the month was again the wettest March for at least 60 years.



Rainfall, March, 1928, as per cent. of average.

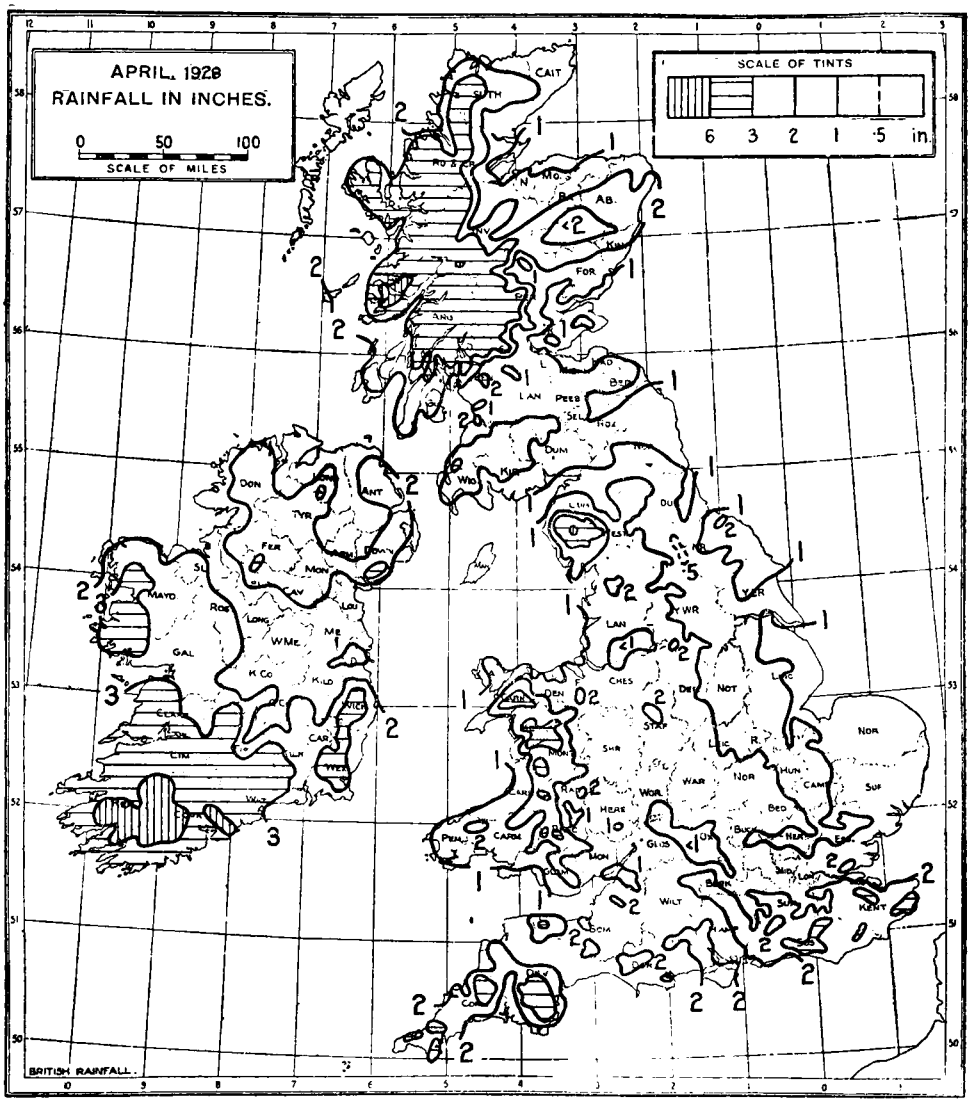
There was heavy flooding of many rivers, notably in Perthshire, about the 21st.

Snow and sleet fell in many places during the cold period from the 8th to 13th. Glasgow had 8 inches of snow on the 11th and Guernsey 1 inch on the 12th.

The weather of **April** was characteristic, being changeable and showery with considerable fair periods.

Although the monthly means of pressure were everywhere below the average, the rainfall over the country as a whole was less than usual. The isobars trended, however, mainly from south to north, the prevailing winds being southerly and in force mainly light to moderate.

The precipitation as shown by the percentage map was somewhat



Rainfall, April, 1928.

more variable than usual. There was 209 per cent. near Cork compared with 39 per cent. at Killybegs, Co. Donegal; 179 per cent. at Lewes Road, Brighton, compared with 40 per cent. at Abergavenny (Monmouth); 137 per cent. at Aberdeen compared with 46 per cent. at Gordon Castle (Morayshire) and 41 per cent. at Loch Leven (Kinross).

During the wintry conditions of the third week of the month snow and hail fell on several days in most districts. Thunderstorms occurred locally on the 10th and in many parts on the 11th.

The map of actual rainfall shows that less than 1 inch for the month was recorded in all three countries. A large area in England with less than one inch stretched from the Solway Firth to the north of London, and included much of the land to the east of the Pennines and of the Chilterns; smaller areas were found along the coast of Wales and in the neighbourhood of Oxford and Cheltenham. There was also less than

Rainfall, April, 1928, as per cent. of average.

one inch along the east coast of Scotland especially in the neighbourhood of the Moray Firth and Firth of Forth, and near Dublin.

April was the first dry month of the year. The general percentage value for the British Isles was 81, the corresponding values for the constituent countries being :—England and Wales 79, Scotland 72 and Ireland 97.

May was another relatively dry month. The weather was mainly sunny and warm at the commencement and end of the month, the intervening period being cool and mainly dull in central and eastern Great Britain.

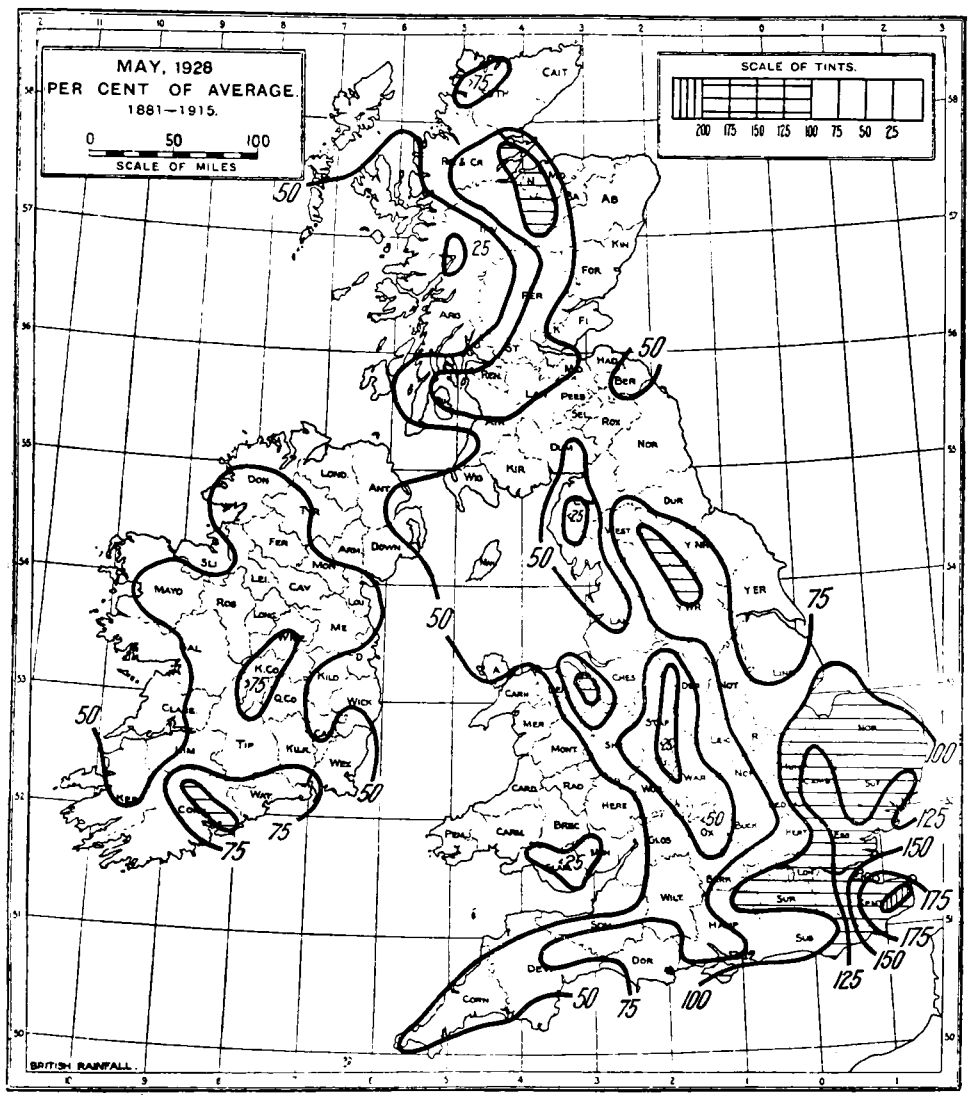
The mean pressure for the month was relatively high to the north-west and low to the south-east of the British Isles. Winds were mostly from north and east and light to moderate in force. A partial

Rainfall, May, 1928.

drought was recorded during the later half of April and first half of May at a number of stations in England, in the Central Plain of Scotland and in eastern Ireland. (*See* Section 3.)

The total rainfall exceeded the average in the south-east of England, the Cheshire Plain, parts of Yorkshire, near the Moray Firth and in Co. Cork. The small percentage values in the usually wet districts of Great Britain were associated with the weakening of the

south-west winds. There was less than 25 per cent. in the Western Highlands of Scotland, the English Lake District, South Wales and in Staffordshire. At Seathwaite, Cumberland, the total was only 1·26 inch being 6·11 inches below the average. This was the smallest total in May since that of 1915 with 1·18 inch. At Glenquoich (Inverness-shire) the total of 1·38 inch was more remarkable, being the lowest recorded

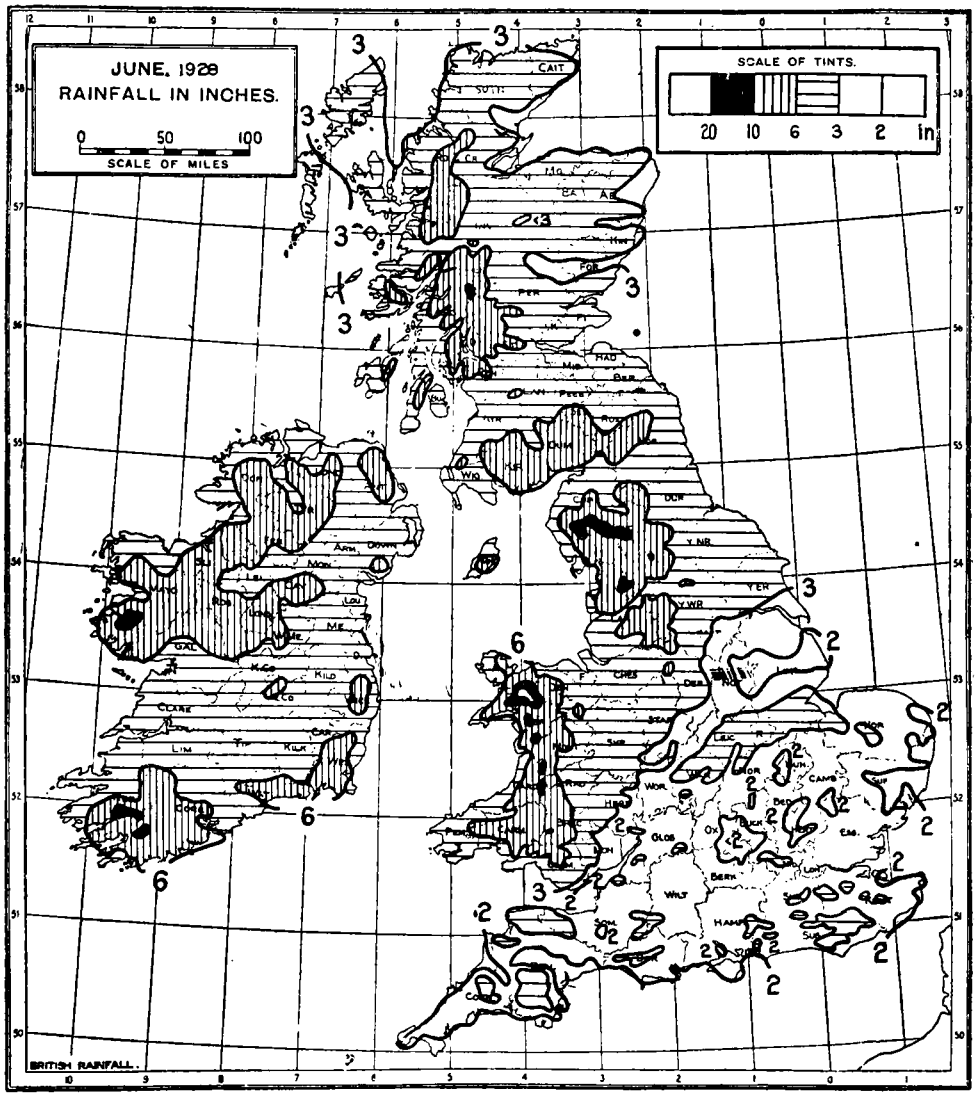


Rainfall, May, 1928, as per cent. of average.

in May for at least 60 years, the previous lowest being 1·64 inch in 1901.

Although only about ·2 inch was recorded to the north of Birmingham during the month, the map of actual rainfall indicates that the rainfall over the country was less variable than usual, for more than 3 inches occurred only over small areas, e.g., on Snowdon, Benmore in Mull, in the mountains of Cork and Kerry and in parts of Ross, Banff and Sutherlandshire.

Apart from a few days of fine, warm weather at the beginning of the month, **June** was unsettled, cool and wet. In nearly all districts, the mean temperature for the month was below the average. After the first five or six days the pressure remained almost continuously low, owing to the frequent passage of depressions and their associated secondaries across or in the neighbourhood of the British Isles, and in all districts the means of atmospheric pressure were below the average.



Rainfall, June, 1928.

The rainfall was below the average only in small areas in England, *viz.*, near the Severn Estuary, from Oxford to Hertford, in east Suffolk, part of Lincolnshire and along the south-west coast. Falls of more than twice the average were widespread in Wales, the north of England, the southern half of Scotland, along the south-east coast of Ireland and across Central Ireland from Dublin to Connemara.

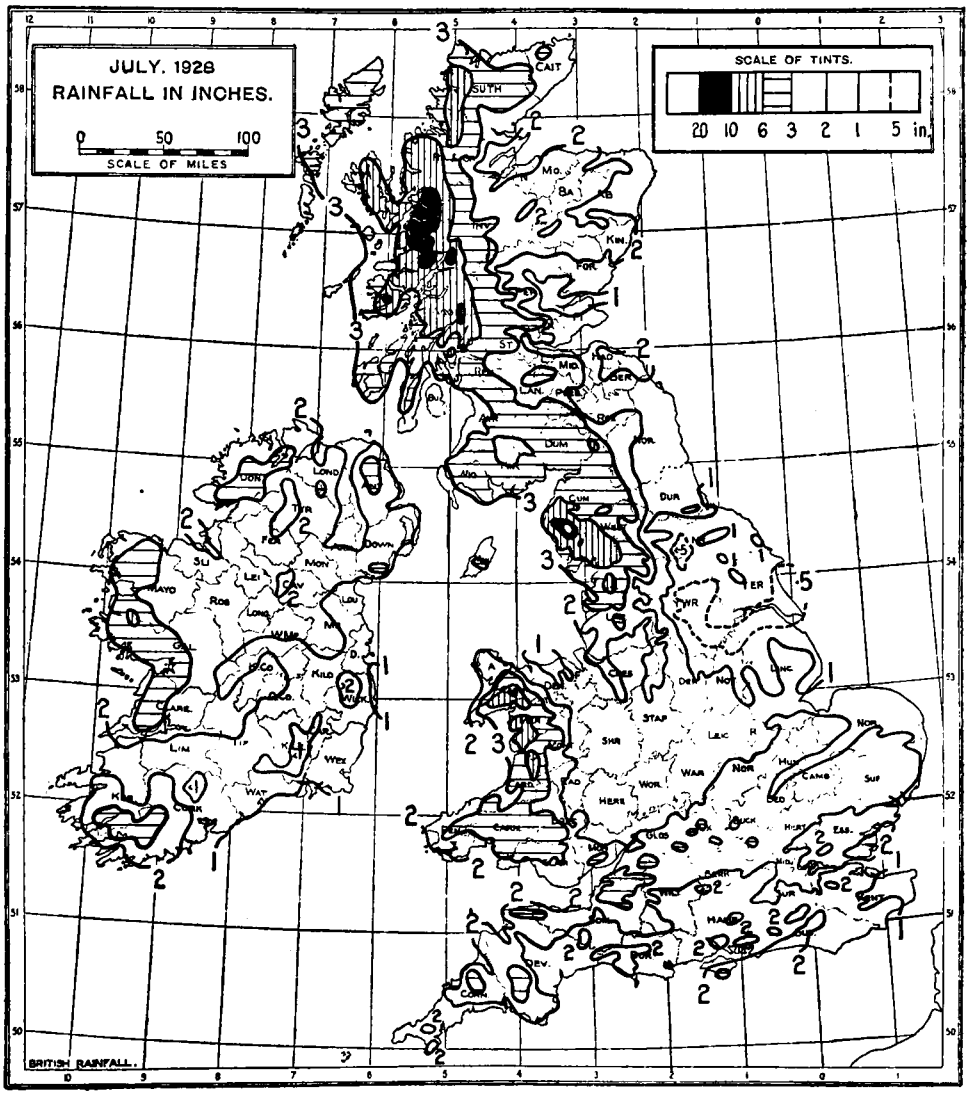
Some of the largest percentage values were 287 at Lilburn Tower, Northumberland; 272 at Middlesbrough; 265 at Castle Forbes, Co. Longford; and 256 at Dumfries. At Seathwaite, Cumberland, the total of 13·77 inches was 111 per cent. or 6·52 inches in excess of the average, and the largest fall in June since that of 1907 when the total was 17·04 inches. The contrast in the percentage values of the north-west and south-east of England is accounted for in part by

Rainfall, June, 1928, as per cent. of average.

the heavy rain of the 28th. While over 4 inches were recorded in both the English Lake District and Snowdonia, there was no rain at all on this day to the south-east of a line from the mouth of the Severn to the Humber. (*See* Section 7).

Over the British Isles as a whole June, 1928, with 172 per cent., was the wettest June since that of 1912 with 187 per cent. June, 1927, was also unusually wet with 158 per cent.

July was mainly dry, sunny and very warm, but wet and cold both at the beginning and the end of the month. The main feature of the weather was the long dry period with abundant sunshine, which set in after the first week over most of England, eastern Scotland and eastern Ireland. No rain at all was recorded at many stations in England and in south-eastern Ireland from July 8th to 25th. (*See* Section 3.)



Rainfall, July, 1928.

The pressure gradient was steeper than usual. The mean pressure was 4 millibars below the average in the Shetlands and 5 millibars in excess in the south-west of England. West or south-west winds were more frequent than usual and often unusually strong in northern England and Scotland. The percentage rainfall map for the month shows that while there were large excesses over most of the west of Great Britain there were large deficiencies in the east. This type of

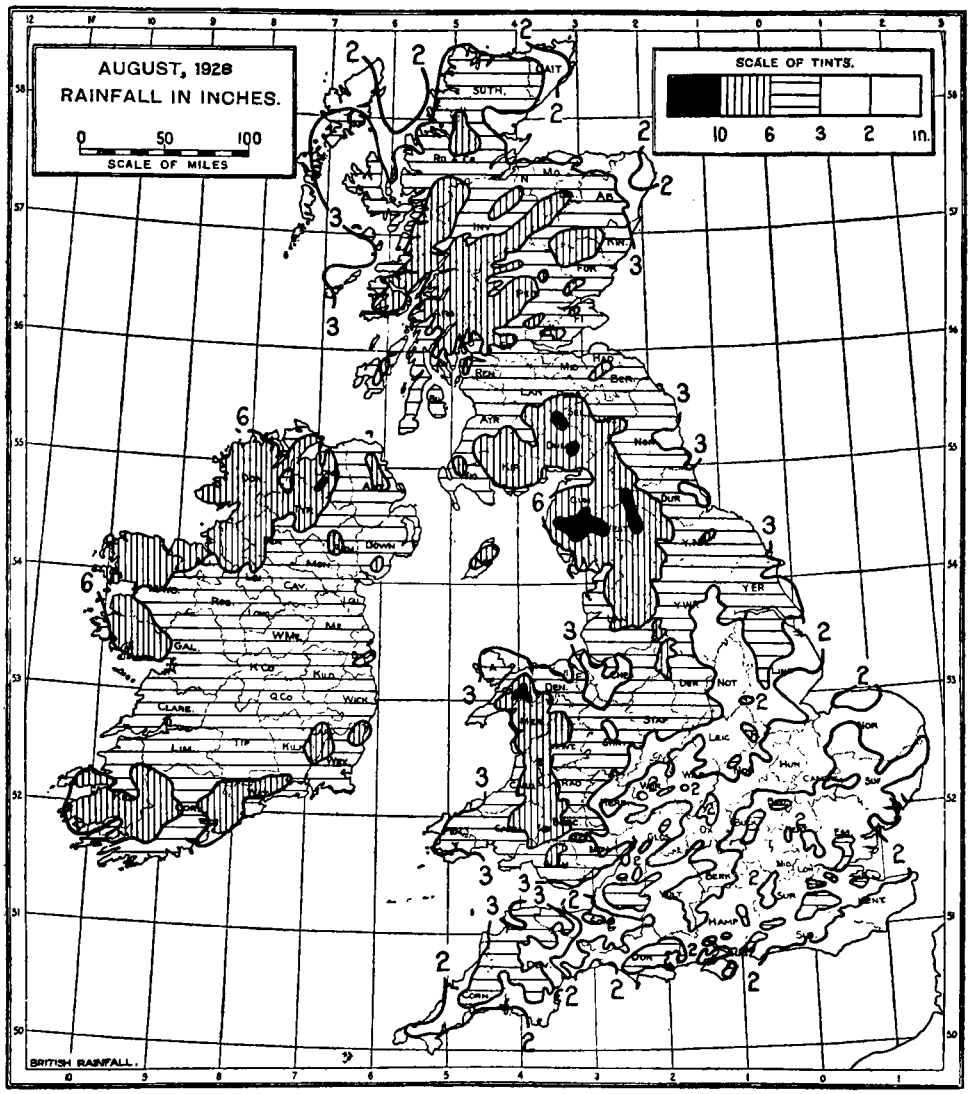
distribution is also shown on the map for July 10th (Section 7) when over 2 inches fell over most of the English Lake District but no rain at all to the east of the Pennines. Considerable areas in north Wales, the English Lake District and the Western Highlands of Scotland recorded more than 150 per cent. of the average, while along the east coast there were large areas with less than 50 per cent. Over part of

Rainfall, July, 1928, as per cent. of average.

the area drained by the Lower Yorkshire Ouse there was less than 25 per cent. At Rotherham the fall was 19 per cent. of the average (·46 inch). On the other hand the percentage values at Dolgelly (Merioneth), Seathwaite (Cumberland) and Glenquoich (Inverness) were 160, 187 and 200 respectively. The total at Glenquoich of 12·83 inches was the largest recorded in July at that station since the record began in 1868, the next largest being that of 11·86 inches in 1906.

August was mainly fair and sunny in the south-east of England, but in the west and north the weather was mainly unsettled with, however, considerable sunny periods. Thunderstorms and heavy rains within short periods (*see* Section 6) occurred in most districts.

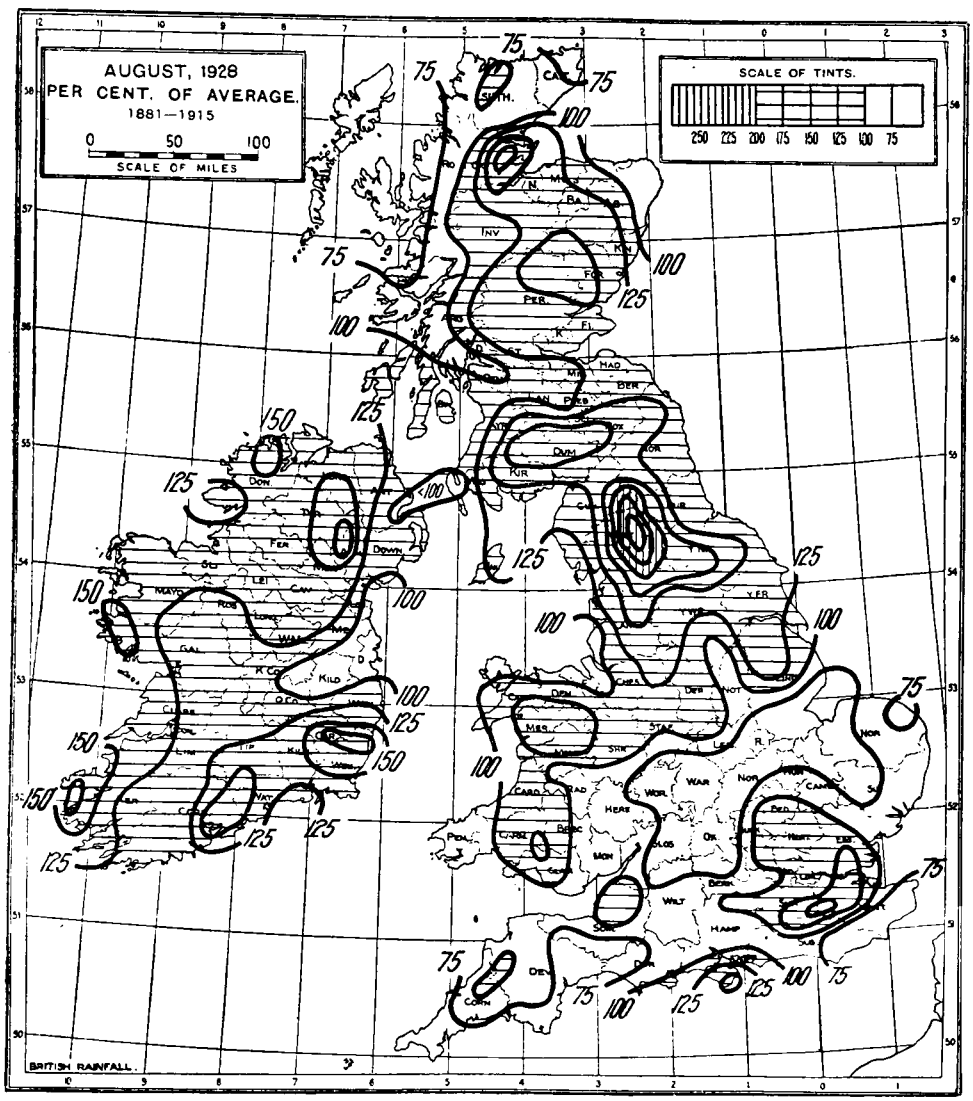
The mean pressure for the month was nearly everywhere below the average. The prevailing winds were between south and west and mainly light to moderate in force.



Rainfall, August, 1928.

The rainfall of the month was in excess of the average over the whole of Ireland except the district around Dublin. There was more than 150 per cent. in five well-marked areas. In Great Britain there was less than 75 per cent. along parts of the south coast of England, over a large area from the Severn Estuary to the Wash, and in parts of the west and north coasts of Scotland. The largest percentage falls in central and southern England were those of 164 and 152 at Edenbridge

and Ventnor, respectively. Falls of 175 per cent. and more occurred in the English Lake District, in the Southern Uplands of Scotland and at Ardross Castle near Alness. The total recorded at Appleby was 8·89 inches or 269 per cent. of the average and as much as 2·87 inches fell on the 20th at this station (*see* Section 7). The percentage map was in many respects similar to that of August, 1927, when the fall at Appleby was 7·75 inches or 235 per cent. of the average.

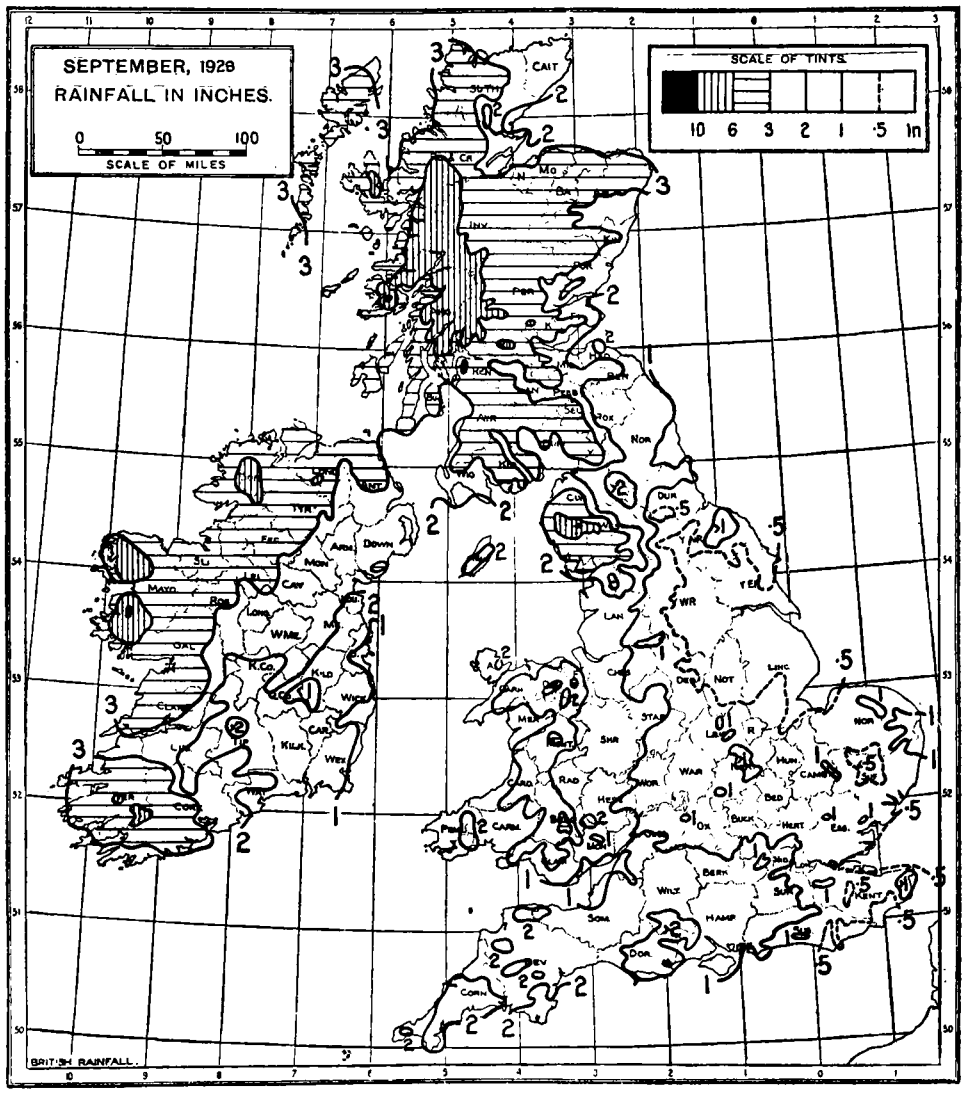


Rainfall, August, 1928, as per cent. of average.

Flooding occurred at times, especially in the Border districts, and various heavy rains within short periods were locally destructive—as on the railway line between Brora and Loth in Sutherlandshire.

The general percentage value for the British Isles was 116, the corresponding values for the constituent countries being :—England and Wales 107, Scotland 116, and Ireland 132.

September was unusually sunny in most districts. At several stations in the east and south-east of England the total sunshine amounts exceeded those usually recorded in the sunniest months of the year in these districts, viz., June or July, At Margate and Ventnor the mean daily sunshine was just over 3 hours in excess of the average.

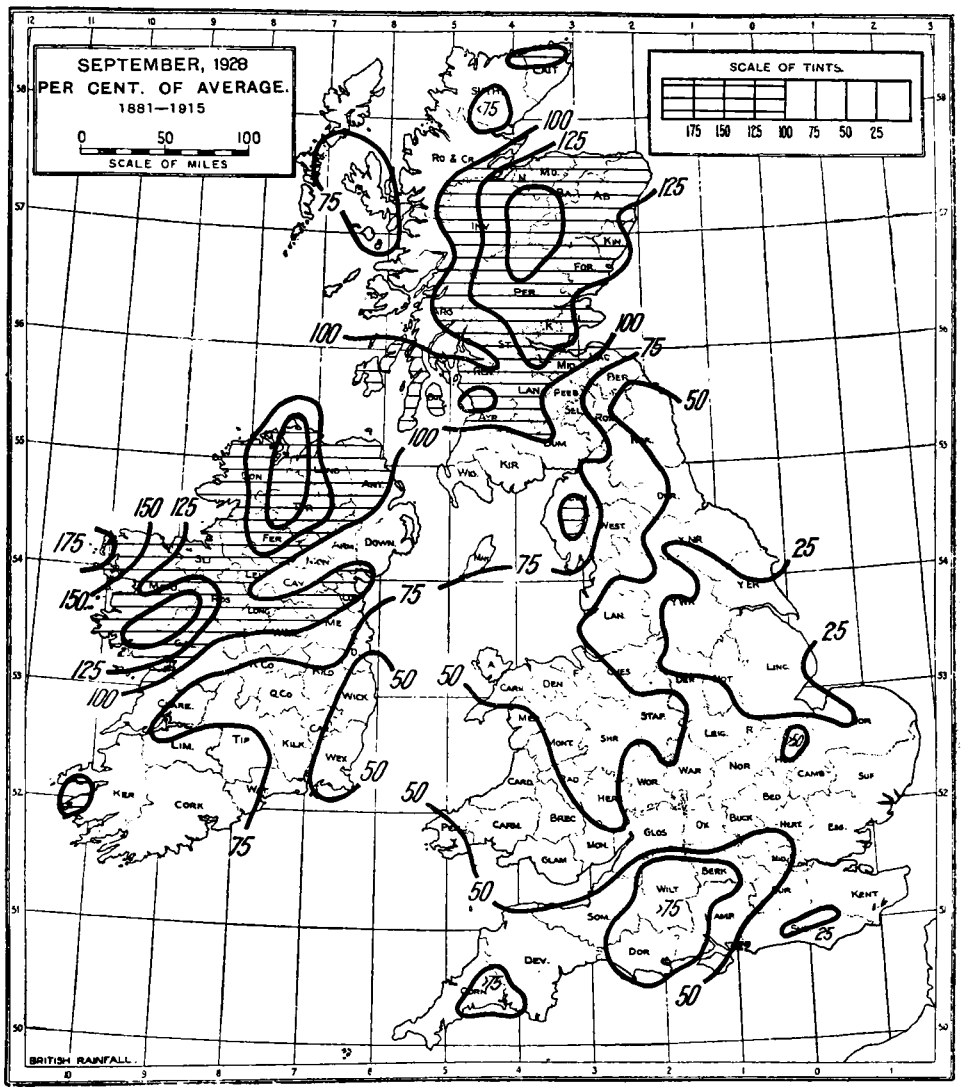


Rainfall, September, 1928.

Over the greater part of England and Wales, conditions were mostly anticyclonic, and these conditions extended to most of the British Isles at the beginning of the month, from the 12th to the 16th, about the 22nd and at the end of the month.

The total rainfall exceeded the average in the north-west of Ireland, over a broad belt across central Scotland from Islay and Bute in the south-west to Moray Firth and the Firth of Forth in the east, as well as in the English Lake District and the north of Caithness. Large areas in Ireland and in the Grampians recorded more than 150 per cent. of

the average. There was less than half of the average rainfall in the south-east of Ireland, much of south and central Wales and over more than half of England, including eastern and central districts. There was less than 25 per cent. in part of Sussex and over a large area between the mouth of the Humber and the Wash stretching as far inland as the Pennines. A few stations in England and Wales reported an absolute drought in September (*see* Section 3). At Shoeburyness (Great Wakering) there was no rain from September 1st to 22nd.

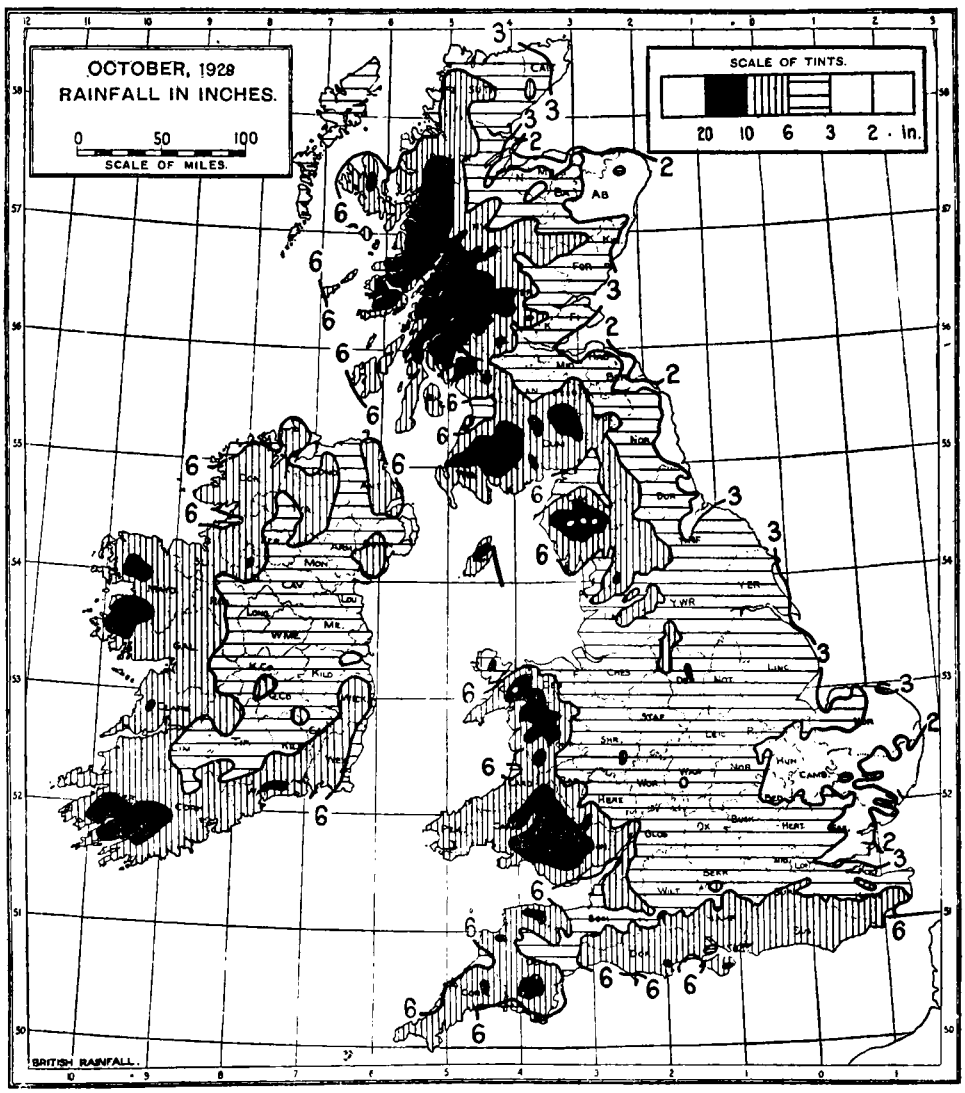


Rainfall, September, 1928, as per cent. of average.

The range on the percentage map was from 11 at Rotherham to 180 at Blacksod Point, Co. Mayo and Tuam, Co. Galway.

September, 1928, shows a marked contrast with September, 1927, when the general precipitation over England and Wales amounted to 224 per cent. of the average and over the British Isles as a whole 204 per cent.

October was generally mild and wet, but with considerable fair periods. There were frequent strong winds and gales during the second half of the month. Conditions during the month were mainly cyclonic. Monthly means of atmospheric pressure were everywhere less than the average and at Stornoway the mean monthly pressure was as much as 7 millibars below the average.



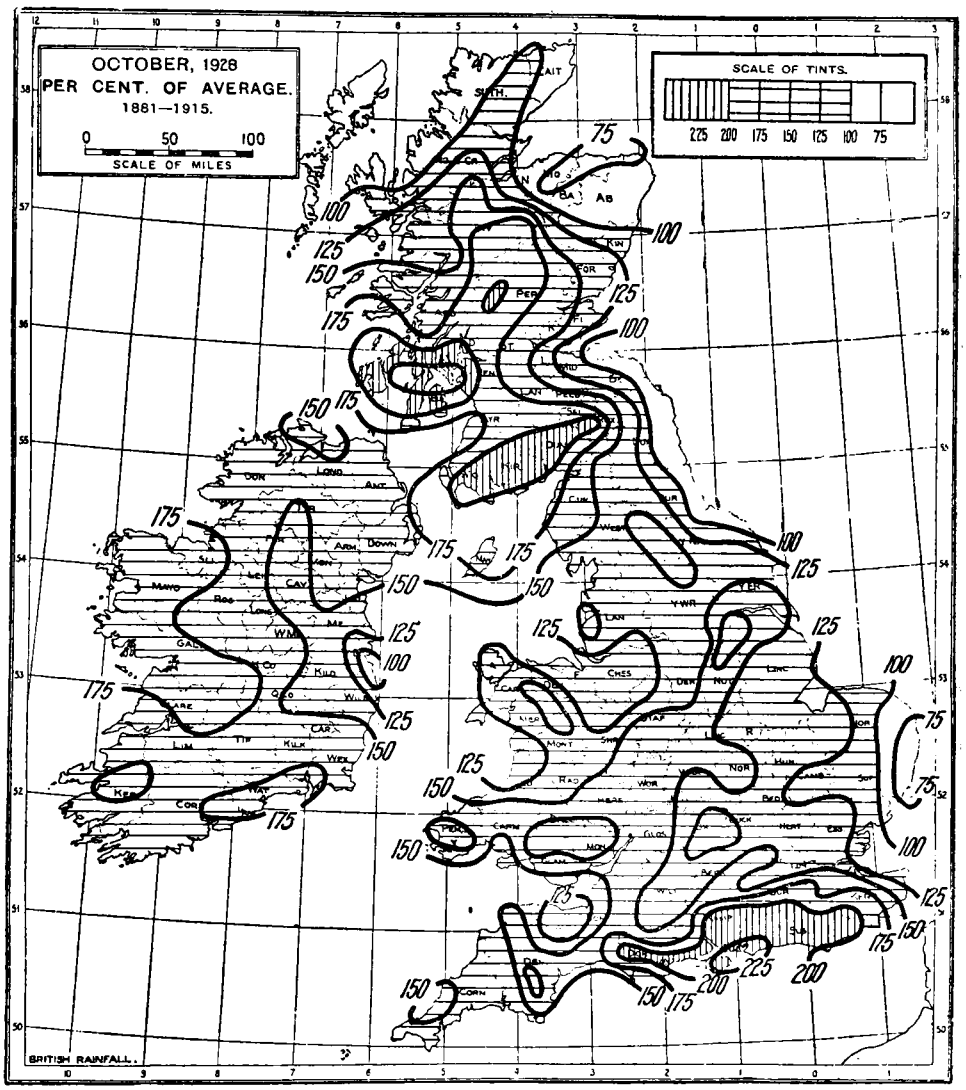
Rainfall, October, 1928.

The total rainfall for the month was less than the average along the east coast of Great Britain, in the north of Scotland and in the neighbourhood of Dublin. There was only 60 per cent. at Rendlesham Hall (Suffolk) and Gordon Castle (Morayshire). On the other hand more than twice the average was recorded over large areas in the south-west of Scotland and in the south of England. At Rothesay the total was 10·32 inches or 234 per cent. of the average and the largest recorded in October in the last 120 years with the one exception of October,

1917, when the total was 10·55 inches. At Ventnor the total was 8·96 inches or 228 per cent. of the average; the largest amount recorded in October since the station was set up in 1840, and the largest in any month since December, 1914, when the total was 9·42 inches.

On the 18th and 19th very heavy falls were widespread with a two-days' aggregate exceeding 3 inches over wide areas (*see* Section 7). There were further heavy falls later during the month.

The map of the rainfall in actual inches shows an unusually large

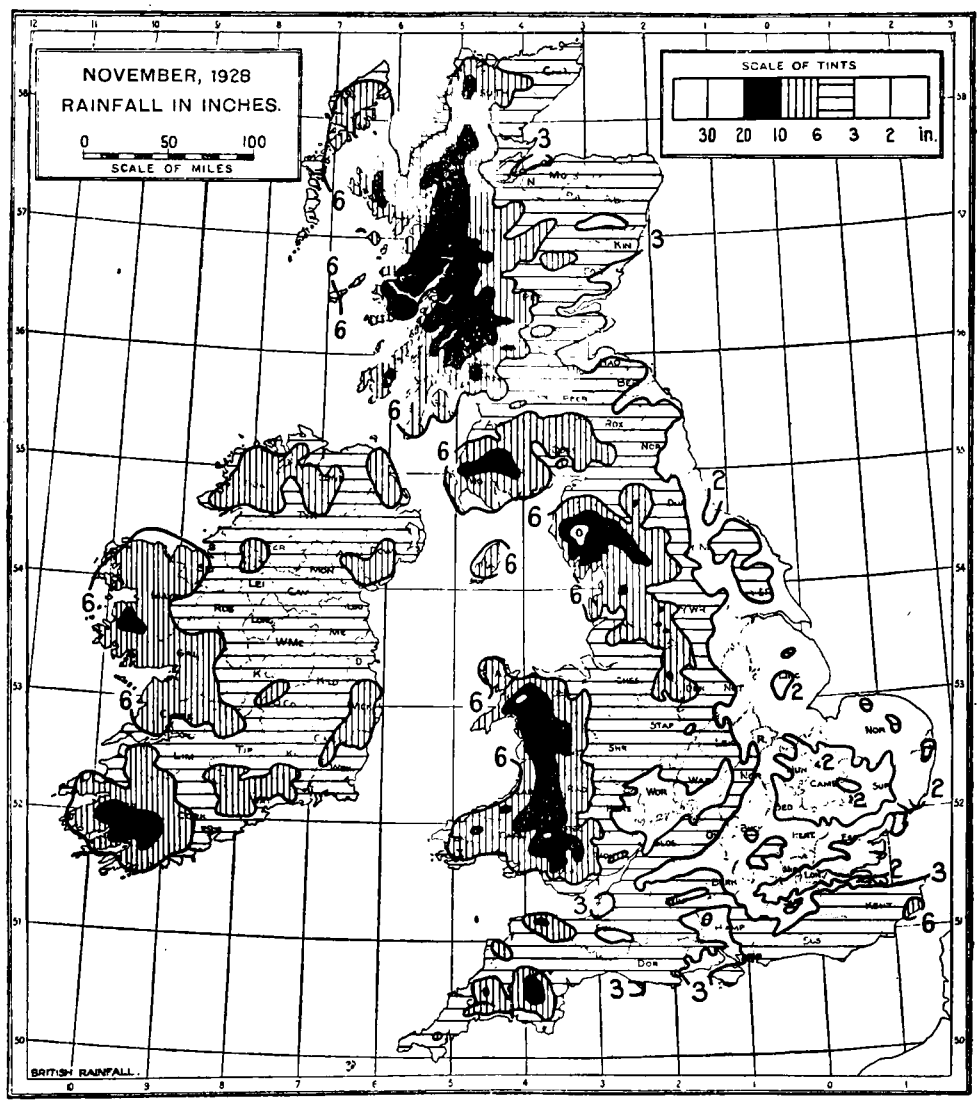


Rainfall, October, 1928, as per cent. of average.

area with more than 6 inches. Thus on the average map falls of more than 6 inches in the south of England are confined to the high land of Dartmoor, Exmoor and Bodmin Moor. In October, 1928, such falls occurred as far east as Dover. In the Southern Uplands of Scotland the areas with more than 10 inches in October, 1928, were much larger than those which usually receive 6 inches.

The weather of **November** was noteworthy for unusual mildness, which lasted from the 10th to 26th; and the widespread destructive gales during the second half of the month.

Rather low temperatures, with severe ground frost, occurred during the first 10 days and on the 27th and 28th, but during the remaining days temperature both by day and by night was decidedly



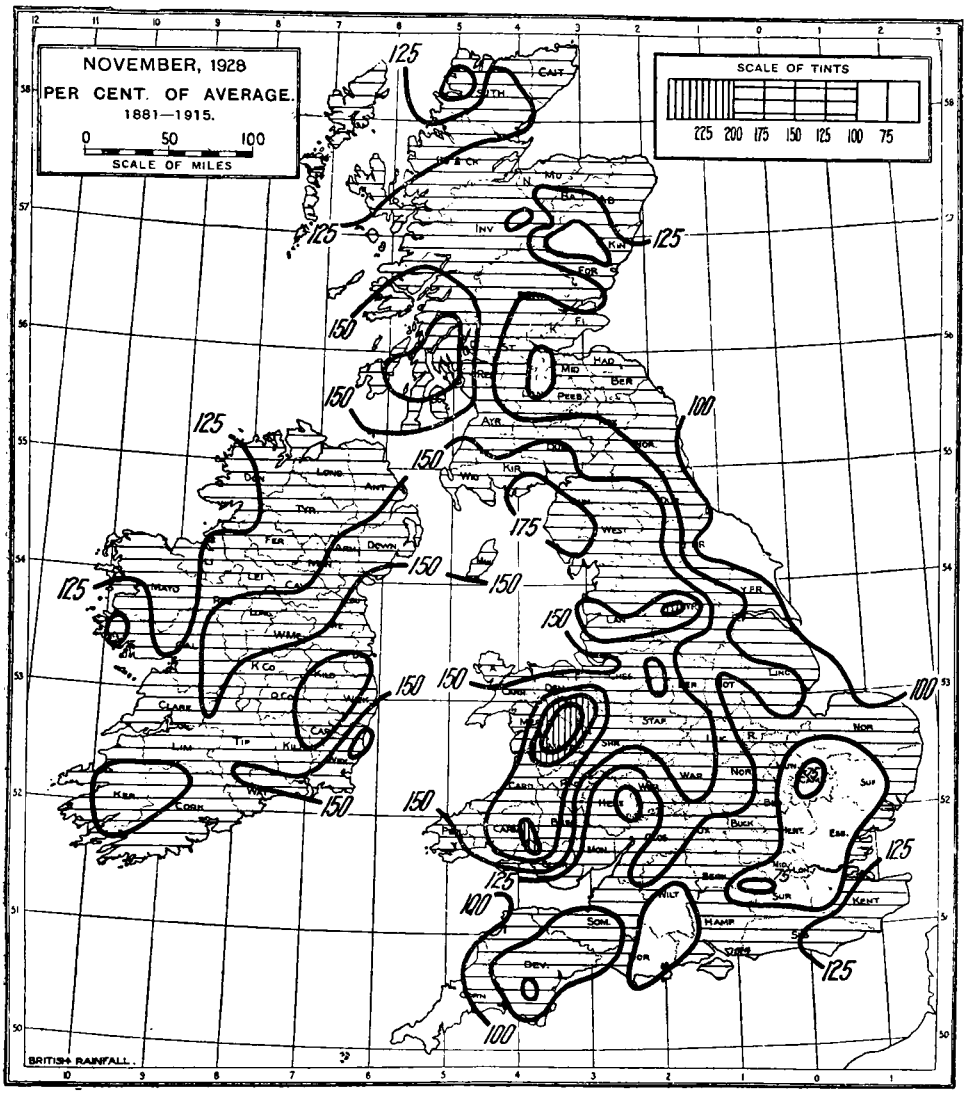
Rainfall, November, 1928.

above the average. The mean temperature for the month at all stations in the British Isles exceeded the average.

Conditions during the greater part of the month were cyclonic, the barometer falling to low levels during the period of disturbed weather from the 10th to the 26th. At all stations monthly means of pressure were markedly below the average. At Edinburgh, pressure fell to 950·7 millibars on the 23rd, the lowest value noted there since

December, 1886. The rainfall credited to this day was ·85 inch out of a total for the month of 2·60 inches on 20 days.

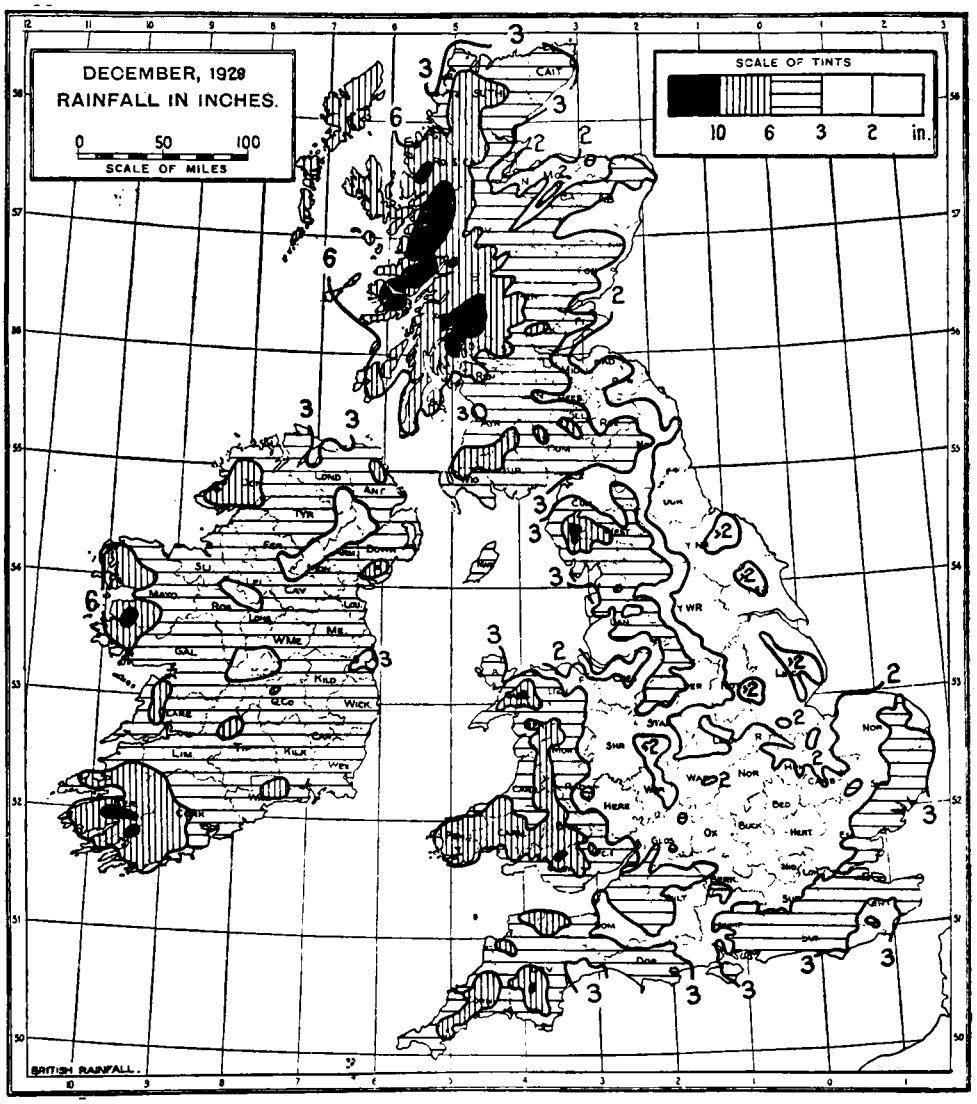
The total rainfall for the month was less than the average over much of the catchment area of the River Dee, in Linlithgowshire, along the east coast of England from Tynemouth to Cromer, near Malvern, over large areas in the south-east of England between



Rainfall, November, 1928, as per cent. of average.

Norwich and Portland Bill and in Cornwall. There was more than twice the average at stations in south and central Wales. The range over the British Isles was from 233 per cent. at Lake Vyrnwy (Montgomeryshire) to about 65 per cent. at Cambridge and Wellington College (Berkshire). The total for the month at Lake Vyrnwy amounted to 13·30 inches of which 12·29 inches fell during the 15 days 10th to 24th, each day giving about ·15 inch or more.

The weather of **December** was very variable with occasional sharp contrasts in temperature from one day to the next, and unusually severe frosts on the 9th, 14th, 15th and at the end of the month. Precipitation occurred frequently, but mainly during the latter half of the month. At a few stations in the east of England a dry spell was completed by the 10th (*see* Section 3). Heavy rain was widespread in Ireland on the 15th and in the English Lake District and South Wales on the 25th



Rainfall, December, 1928.

(*see* Section 7). A noteworthy feature of the weather of the month was the complete absence of wet-spells at the 100 selected stations used in Section 4. Wet spells are usually common during this month.

Monthly means of atmospheric pressure were in excess of the average in most districts. The rainfall for the month was everywhere fairly close to the average, the areas with deficiencies were more

widespread than those with excesses. Totals of less than half the usual amount were confined to the east of the English Lake District. Falls exceeding 150 per cent. occurred over small areas in the east of Kent and Suffolk and near Melvich in Sutherlandshire. At Melvich there was 6·58 inches on 25 days, the largest daily amount being ·84 inch on the 5th.

The map of the rainfall in inches is similar therefore to that of the average map for December. On the average map, however, falls of

Rainfall, December, 1928, as per cent. of average.

less than 2 inches are confined almost entirely to Cambridgeshire, while more than 20 inches occur in the English Lake District, Snowdonia and parts of the Western Highlands of Scotland.

The general percentage value for the British Isles was 93, the corresponding values for the constituent countries being:—England and Wales, 91, Scotland, 94 and Ireland 95.

Table XX.—*Monthly Rainfall at* 400 *Stations in the British Isles during* 1928.

ENGLAND

County and River Division.		Station.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
			in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.
London	2	St. Pancras (Camden Square) ...	3·60	1·66	1·39	1·32	1·81	2·59	2·12	2·60	·69	3·41	2·15	2·66	26·00
Surrey	6	Haslemere (Hazelhurst)	6·38	2·86	3·56	2·30	2·46	3·00	2·02	3·01	1·52	7·88	3·86	3·77	42·62
,,	6	Woking (The Green).....	3·20	1·61	1·86	2·21	1·97	2·07	2·25	2·56	1·19	4·49	1·69	2·47	27·57
Kent	1	Tenterden (Ashenden).....	3·50	1·33	1·86	2·73	3·09	2·34	1·11	1·50	·60	6·48	3·79	2·49	30·82
,,	1	Folkestone (Cheriton Road)	3·93	1·13	1·37	2·98	3·37	2·11	1·10	1·24	·48	6·55	5·49	3·46	33·21
,,	2	St. Peters (Hildersham House) ..	3·09	1·14	2·18	2·44	3·77	2·30	·98	1·22	1·50	4·13	4·69	3·80	31·24
,,	3	Teynham (New Gardens).....	2·61	·92	2·12	2·06	2·42	1·89	1·07	2·11	·68	3·64	2·93	3·17	25·62
,,	4	Rochester (Knight's Place)	3·04	1·08	2·03	2·32	3·10	2·87	1·93	2·93	·75	4·06	3·03	3·17	30·31
,,	5	Westerham (Town)	5·02	1·97	2·41	2·50	2·26	3·21	2·04	2·96	·85	5·29	3·73	4·43	36·67
Sussex	1	Selsey (Large Acres)	4·52	1·81	2·04	2·15	1·93	2·34	2·35	2·01	1·08	7·21	3·75	3·68	34·87
,,	3	Worthing (Victoria Park)	4·68	1·44	1·96	1·76	·90	2·02	2·32	1·89	·69	8·11	3·51	3·56	32·84
,,	4	Balcombe (The Gables)	6·04	2·34	3·42	2·54	1·56	3·19	1·66	3·17	1·00	7·96	3·93	4·09	40·90
,,	5	Eastbourne (Wilmington Sq.) ...	5·43	1·91	2·43	2·09	1·56	2·57	1·40	1·08	·49	7·92	4·74	3·12	34·74
,,	5	St. Leonards (Gensing Gdns.)....	5·15	1·76	2·20	2·94	2·90	2·99	1·57	1·55	·32	9·01	4·59	3·11	38·09
,,	7	Crowborough (Uckfield Lodge) ..	6·40	2·00	2·37	2·91	1·54	3·97	2·23	2·82	·94	8·77	5·64	4·73	44·32
Hampshire	1	Totland Bay (Aston House)	5·66	2·17	2·75	2·13	·83	2·00	1·69	2·37	1·33	7·08	2·95	2·61	33·57
,,	4	Stockbridge (Houghton Lodge)..	6·08	2·33	3·12	1·89	1·71	2·64	1·54	2·06	1·72	6·61	2·59	3·04	35·33
,,	5	Bishops Waltham (Park Ho.)....	5·55	2·46	2·70	1·58	1·33	2·17	1·80	2·50	1·00	6·77	2·92	3·00	33·78
,,	8	Sherborne St. John	4·72	2·25	2·28	1·72	1·94	2·22	1·49	2·69	1·74	5·26	2·85	2·80	31·96
Berkshire	4	Bucklebury Place	3·41	1·69	2·60	1·64	2·31	2·15	1·89	1·95	1·66	5·47	2·43	2·34	29·54
,,	5	Upton (Manor House)	3·01	1·81	1·96	1·03	·80	2·44	2·18	1·26	·94	3·39	2·32	2·14	23·28
Hertfordshire	2	St. Albans (County Museum)	4·27	1·80	2·27	·90	1·72	1·78	2·25	1·81	·93	4·15	2·81	2·49	27·18
,,	3	Royston (Therfield Rectory)	2·76	1·23	1·59	1·00	2·05	2·22	2·58	3·02	·82	3·07	1·80	2·68	24·82
Buckinghamshire	3	Slough (Upton)	3·49	1·48	1·79	1·22	1·77	2·36	1·93	1·99	1·25	4·77	2·06	2·22	26·33
,,	3	Hampden House	4·52	1·74	2·26	1·10	1·60	2·35	2·09	2·58	1·05	5·34	3·21	2·63	30·47
,,	5	Wolverton (St. George's Vic.) ...	3·48	2·01	1·02	1·18	1·37	2·10	2·37	1·76	·55	3·78	2·57	2·68	24·87
Oxfordshire	2	Wootton Rectory	3·90	1·97	1·98	1·09	·51	2·65	2·89	2·66	·83	3·77	3·21	2·43	27·89
Northamptonshire	1	Naseby Reservoir	3·88	1·75	2·28	1·73	1·14	3·12	1·42	3·87	·72	3·92	2·79	2·58	29·20
,,	4	Wellingborough (Swanspool)	3·36	1·55	1·41	1·10	·96	2·21	2·70	1·57	1·06	3·38	2·88	2·46	24·64
Huntingdonshire	1	St. Ives (Slepe House)	3·52	·90	·91	1·03	2·23	2·22	1·90	1·34	·65	2·34	1·75	2·09	20·88
Bedfordshire	3	Shefford Council School	2·64	1·25	1·32	1·35	1·51	1·78	2·48	2·67	·86	2·65	1·64	2·31	22·46
Cambridgeshire	2	Littleport (Highfield House)	2·66	·85	1·20	1·05	2·06	1·99	2·07	2·10	·71	2·39	1·50	2·03	20·61

Table XX.—(*con.*) *Monthly Rainfall*—**ENGLAND**—(*con.*)

County and River Division.		Station.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
			in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.
Cambridgeshire	3	Parson Drove (Clows Cross)	2·90	·80	1·23	·90	1·71	2·80	2·39	1·86	·68	2·99	2·17	1·96	22·39
Essex.....	2	Leigh (Brick House)	2·26	·79	2·04	1·53	2·13	2·69	2·53	2·35	·47	2·49	1·56	3·23	24·07
,, ...	2	Ongar (Marden Ash)	3·06	1·41	1·24	1·06	2·44	2·69	1·83	2·11	·52	3·09	1·95	2·09	23·49
,, ...	3	Bradwell-on-Sea (Bradwell Hall)	2·82	1·08	2·64	1·41	1·36	2·89	1·77	2·58	·55	2·33	1·79	3·63	24·85
,, ...	4	Gt. Bardfield (South Lodge)	3·32	1·26	2·16	1·13	1·64	2·38	2·02	1·98	·71	3·06	2·13	2·57	24·36
Suffolk	1	Hawkedon Rectory	3·52	1·32	1·97	1·48	1·94	2·28	2·63	1·84	·81	3·23	1·99	3·15	26·16
,, ...	2	Ipswich (Copdock)	3·55	1·19	2·48	1·53	1·46	1·89	2·27	2·50	·52	2·19	2·17	4·02	25·77
,, ...	3	Orford (The Gables)	3·62	1·13	1·93	1·70	1·87	1·98	2·66	1·85	·65	1·81	3·39	3·60	26·19
,, ...	3	Halesworth Rectory	3·29	1·09	2·06	1·53	1·88	2·06	2·23	3·02	·95	2·02	2·58	3·81	26·52
,, ...	4	Yarmouth (Burgh Hall)	2·84	1·35	1·30	1·56	1·74	2·19	1·87	1·60	1·91	2·35	2·68	2·87	24·26
,, ...	5	Bury St. Edmunds (Westley Ho.)	3·51	1·31	1·52	1·39	1·90	2·41	2·86	2·60	·57	2·89	2·10	2·84	25·90
Norfolk	1	Diss (The Cedars)	3·19	1·03	2·15	1·38	2·12	2·09	2·23	2·08	·49	1·81	1·71	3·11	23·39
,, ...	1	Wymondham	3·73	1·27	1·48	1·27	1·66	2·20	2·16	1·58	·90	2·39	2·24	2·79	23·67
,, ...	2	Aylsham (Rippon Hall)	3·51	1·52	1·50	1·70	1·73	2·86	1·92	1·54	·73	2·91	3·03	3·16	26·11
,, ...	3	Sandringham House Gardens	4·09	1·56	2·01	1·47	1·76	2·57	1·90	2·71	·66	3·23	2·73	2·45	27·14
,, ...	3	Walsingham	4·36	2·09	2·03	1·41	1·90	2·39	1·68	2·59	1·29	3·09	3·26	2·69	28·78
,, ...	4	Thetford (Waterworks).....	3·66	1·22	1·50	1·34	1·73	3·81	2·57	2·38	·55	2·94	2·03	2·34	26·07
,, ...	4	Little Dunham (Dunham Cot.) ..	4·71	1·43	1·87	1·52	2·37	3·38	2·29	2·28	·56	3·45	2·74	2·90	29·50
Wiltshire.....	1	Bradford (Manvers House)	4·58	2·55	2·49	1·24	1·65	2·18	2·32	2·07	1·85	4·80	3·61	3·31	32·65
,, ...	2	Mere (Charnage)	4·02	2·44	3·05	1·73	1·74	2·85	2·21	1·63	1·74	5·71	4·18	3·51	34·81
,, ...	3	Larkhill (School of Artillery)	3·75	1·74	1·96	1·37	1·72	1·94	1·50	1·62	1·28	4·56	2·52	2·23	26·19
,, ...	5	Marlborough College.....	5·90	2·34	2·46	2·03	·93	2·09	2·77	1·83	1·42	4·36	3·94	3·15	33·22
Dorsetshire	3	Weymouth (Springfield).....	4·50	2·91	2·91	1·89	1·37	2·09	2·15	2·56	2·17	5·88	2·78	3·71	34·92
,, ...	3	Beaminster (Hamilton Lodge) ...	6·77	2·86	3·18	2·01	1·34	2·38	1·76	2·01	1·91	8·51	4·46	3·38	40·57
,, ...	4	Winterbourne (Whitchurch Vic.)..	5·79	2·96	2·83	1·89	1·67	2·27	1·75	4·16	2·10	7·85	3·69	3·48	40·44
,, ...	4	Wimborne (Codford House)	5·92	2·94	2·96	1·74	1·71	2·25	1·27	3·69	2·34	8·21	3·48	2·76	39·27
South Devonshire	3	South Brent (Great Aish)	15·63	7·15	7·24	3·40	1·92	4·09	2·91	3·88	2·29	11·70	11·50	7·82	79·53
,, ,,	5	Teignmouth (Den Gardens)	4·10	2·42	3·58	1·78	1·25	1·61	1·56	2·31	2·20	5·52	4·47	3·86	34·66
,, ,,	6	Crediton (Okefield)	3·95	3·21	3·29	1·65	1·72	1·86	1·55	1·98	1·35	3·86	3·48	4·11	32·01
,, ,,	7	Ottery St. Mary (West Hill)	5·99	3·21	3·82	1·57	1·08	2·18	1·79	1·73	1·41	5·63	3·76	3·01	35·18
North Devonshire	1	Woolacombe (Hotel Grounds)....	5·26	3·06	3·20	1·23	·70	2·94	2·16	2·13	1·86	4·67	3·06	3·85	34·12
,, ,,	3	Okehampton (Uplands)	9·82	5·29	5·91	2·57	1·34	2·46	2·77	2·87	1·66	6·94	8·08	6·50	56·21

Table XX.—(*con.*) *Monthly Rainfall*—**ENGLAND**—(*con.*)

County and River Division.		Station.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
			in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.
North Devonshire	3	Dolton (Hilliers)	6·55	4·04	3·74	1·77	1·37	1·93	2·36	2·65	1·54	5·76	4·71	5·12	41·54
Cornwall	1	Redruth (Trewirgie)	8·88	4·04	7·51	3·23	1·68	2·61	1·63	2·19	1·74	8·30	4·71	6·19	52·71
,,	1	Newquay (Mount Wise)	6·02	3·19	4·53	1·89	·85	2·30	1·27	2·08	2·18	5·82	3·69	5·20	39·02
,,	1	Morwenstow (Tonacombe Manor)	7·16	3·15	3·89	1·46	1·20	2·59	2·41	2·64	1·95	7·21	3·87	5·18	42·71
,,	2	Penzance (Morrab Gardens)	8·25	4·33	5·60	2·57	1·16	2·23	1·65	2·19	1·72	6·85	3·98	5·44	45·97
,,	2	St. Austell (Trevarna)	8·14	4·83	7·28	2·18	1·69	2·27	1·86	3·17	2·50	7·28	4·72	6·16	52·08
,,	2	Liskeard (Penmilder)	9·01	4·75	6·80	3·12	1·71	3·03	2·35	3·14	1·96	8·03	7·92	5·80	57·62
,,	2	Bolventor Vicarage	13·69	7·36	8·99	4·01	2·17	3·98	3·23	4·83	2·36	11·23	10·67	8·73	81·25
,,	3	Devonport (Cremyll)	7·77	2·39	4·52	1·37	1·17	2·39	1·98	2·23	1·75	6·02	4·56	4·09	40·24
,,	4	Tresco Abbey	4·92	2·80	4·15	4·54	2·75	2·04	1·07	1·68	2·32	6·15	3·18	3·40	39·00
Somersetshire	1	Long Ashton (Research Stn.)	6·28	3·69	2·86	1·39	1·11	2·87	3·17	3·15	1·18	7·26	3·76	3·75	40·47
,,	2	Street (Millfield)	4·06	2·44	2·60	1·30	·72	3·04	2·37	2·11	1·21	5·30	3·33	2·85	31·33
,,	2	Burnham (Chalbury)	4·85	2·80	2·49	1·61	·46	2·65	2·63	2·77	1·08	5·73	2·85	3·05	32·97
,,	3	Taunton (The Park)	3·34	2·48	2·44	1·62	1·07	1·96	2·00	1·61	1·77	5·02	3·17	2·61	29·09
,,	5	Brushford Rectory	8·08	6·06	4·59	1·86	1·11	3·29	2·42	2·82	1·38	6·08	6·20	5·74	49·63
Gloucestershire	3	Avening House	5·62	3·15	3·70	1·35	1·01	2·48	2·50	2·65	·94	5·89	3·72	3·04	36·05
,,	3	Cheltenham (Montpellier Gdns.)	3·77	1·83	2·10	·76	·72	2·27	1·56	2·71	·77	5·03	2·39	2·30	26·21
,,	4	Mickleton (Bank House)	3·04	1·33	2·67	1·04	·90	2·12	1·73	1·82	·68	3·82	2·30	2·79	24·24
,,	7	Lechlade (Claydon House)	3·53	2·03	1·89	·92	1·08	3·14	3·02	1·94	·94	4·01	2·42	2·32	27·24
Herefordshire	1	Ross (Birchlea)	4·63	2·14	4·10	1·08	·86	2·11	1·45	2·03	1·05	5·61	2·81	2·53	30·40
,,	1	Weobley School	4·50	2·26	3·25	1·38	·77	3·57	1·75	2·41	1·50	5·03	3·76	2·37	32·55
Shropshire	3	Bromfield (Warwick House)	4·36	2·19	2·76	1·59	1·01	3·51	1·16	3·23	1·57	5·19	3·88	1·82	32·27
,,	3	Lydbury North (Totterton)	4·10	2·17	2·29	1·35	1·19	4·10	1·41	3·53	1·31	4·43	3·94	1·97	31·79
,,	3	Much Wenlock (Willey Park)	4·23	2·04	2·06	1·59	1·06	3·05	1·27	3·15	1·35	4·91	3·80	2·33	30·84
Staffordshire	2	Kingswinford (Ashwood P.S.)	4·18	1·99	2·06	1·68	·48	2·55	1·04	3·01	·67	4·36	3·23	1·96	27·21
,,	2	Market Drayton (Old Springs)	5·12	2·27	1·54	·99	1·18	4·55	1·52	3·35	1·12	3·77	4·01	2·52	31·94
,,	3	Lichfield (St. John Street)	4·33	2·26	1·25	1·18	·18	2·33	1·07	3·56	·50	4·13	3·20	1·88	25·87
,,	3	Stafford (Corporation Depot)	4·77	3·00	2·27	1·99	·22	3·31	1·59	3·20	1·31	3·84	4·16	2·40	32·06
,,	5	Ashbourne (Mayfield House)	7·78	4·33	2·75	1·30	·56	3·73	1·47	3·50	·56	4·78	6·46	2·89	40·11
Worcestershire	1	Malvern (Free Library)	4·41	2·21	3·04	1·21	1·13	2·53	1·52	1·91	·68	5·15	2·42	2·42	28·63
,,	2	Bewdley (C.E. School)	3·91	1·98	2·13	1·26	1·19	2·92	1·16	2·25	·80	4·60	3·12	1·96	27·28
,,	3	Redditch (Hewell Gardens)	4·83	2·10	2·58	1·79	·77	3·04	1·15	2·31	·59	4·74	2·91	2·27	29·08

Table XX.—(*con.*) *Monthly Rainfall*—**ENGLAND**—(*con.*)

County and River Division.		Station.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
			in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.
Warwickshire ..	1	Coventry (Keresley Grange)	4·30	2·13	2·21	2·04	·83	3·74	1·43	2·46	·72	4·67	3·68	2·26	30·47
,, ..	3	Farnborough	4·58	2·51	2·47	1·65	·74	2·47	2·40	1·67	·96	4·34	4·30	3·03	31·12
Leicestershire ..	4	Loughboro' (Nan Pantan Res.) ..	5·08	2·64	1·80	·75	1·06	2·72	1·47	2·91	·83	4·27	3·88	1·68	29·09
,, ..	4	Belvoir Castle Gardens.....	3·77	1·58	1·19	·58	1·79	3·43	1·15	1·95	·46	3·60	2·37	1·59	23·46
Rutlandshire ..	1	Uppingham (Ridlington)	4·70	1·74	1·97	·91	1·84	3·36	1·52	3·02	·67	3·56	2·80	2·45	28·54
Lincolnshire ...	2	Market Deeping (Wilsthorpe)	2·51	·92	1·76	·66	1·65	2·87	2·01	1·36	·57	3·18	2·31	1·88	21·68
,, ...	3	Boston (Black Sluice, Skirbeck) .	3·48	1·34	1·94	1·15	1·70	3·17	1·23	1·68	·24	3·95	2·72	2·47	25·07
,, ...	3	Sleaford (Kesteven Mental Hos.)	3·24	1·37	2·29	·69	1·51	2·95	1·00	2·28	·57	3·81	2·46	1·83	24·00
,, ...	3	Hackthorn Hall.....	3·55	1·57	1·65	1·04	1·49	1·88	·83	3·98	·23	4·23	2·52	1·42	24·39
,, ...	4	Skegness (Marine Gardens)	3·85	1·57	1·26	1·13	1·76	2·35	·94	1·72	·62	3·33	2·66	2·09	23·28
,, ...	4	Louth (Westgate)	4·24	1·78	1·66	1·26	1·35	1·84	1·05	2·90	·43	4·31	2·63	2·13	25·58
,, ...	5	Brigg (Wrawby Road)	3·98	1·70	2·26	1·00	1·32	2·67	·47	4·29	·28	4·20	2·78	2·07	27·02
Nottingham ...	2	Newark	4·04	1·67	1·87	·84	1·61	1·68	1·16	2·45	·34	4·41	2·70	2·42	25·19
,, ...	5	Mansfield (West Bank).....	4·60	2·08	3·02	·93	1·33	2·63	1·21	3·11	·35	5·66	3·23	2·23	30·38
Derbyshire	5	Littleover (The Knoll).....	5·08	2·65	1·84	1·13	·69	3·12	1·43	3·58	·77	4·21	3·36	2·12	29·98
,, ...	6	Matlock Bath (Lower Tower)	7·93	3·61	2·84	1·09	·74	3·29	1·28	3·96	·53	5·39	6·11	2·63	39·40
,, ...	6	Buxton (Devonshire Hospital) ..	10·76	5·10	2·96	1·34	·70	4·93	2·07	5·31	·79	6·42	8·29	3·03	51·70
Cheshire	1	Altrincham (Burlington Cot.) ...	7·15	3·35	1·81	1·35	1·26	5·65	1·84	4·51	·95	4·02	5·45	1·99	39·33
,, ...	2	Northwich (Winnington)	6·00	2·50	1·51	·91	1·28	4·58	1·85	2·35	1·06	3·64	4·11	1·78	31·57
,, ...	4	Eccleston	4·06	2·00	1·62	1·63	1·58	5·01	1·58	2·61	1·87	3·17	3·87	2·34	31·34
,, ...	4	Neston (Vine House)	3·31	1·89	1·31	1·14	1·82	3·56	1·47	2·58	1·51	3·28	3·54	1·89	27·30
South Lancashire	3	Bolton (Queen's Park).....	11·33	5·37	2·47	1·02	1·22	6·58	2·94	5·76	·84	6·09	6·83	3·56	54·01
Central ,,	1	Burnley (Swinden)	11·23	6·04	4·55	1·46	1·74	7·02	1·91	6·77	1·12	6·49	7·04	3·42	58·79
,, ,,	3	Southport (Hesketh Park)	7·15	3·31	2·02	1·39	1·45	4·86	2·68	3·12	1·31	5·57	5·72	2·95	41·53
North ,,	2	Ulverston (Poaka Beck)	12·68	5·46	5·10	2·77	1·15	5·31	5·35	6·29	3·80	7·60	9·25	4·71	69·47
,, ,,	4	Lancaster (Greg Obsy.)	10·69	5·64	3·48	1·86	1·06	7·48	5·71	6·60	3·03	5·83	7·26	3·92	62·56
,, ,,	5	Barton (Newsham House)	9·70	4·09	2·57	1·32	·93	8·46	3·46	5·50	1·70	6·05	6·31	3·00	53·09
Yorkshire, W.R.	2	Settle (Gas Works)	12·13	6·77	3·92	1·34	·99	7·16	2·72	6·75	1·21	5·92	7·38	3·44	59·73
,, ,,	7	Sheffield (Weston Park)	6·61	4·13	2·84	1·26	1·26	3·04	·70	2·53	·24	4·80	4·65	2·25	34·31
,, ,,	7	Doncaster (Avenue Road)	3·86	2·07	2·61	·87	2·43	2·60	·57	2·82	·33	4·61	2·65	1·78	27·20
,, ,,	8	Meltham (Harewood Lodge)	12·48	7·02	3·25	1·59	1·89	4·94	1·32	4·32	·39	5·19	7·94	3·37	53·70
,, ,,	9	Leeds (Wortley Reservoir)	6·06	2·59	2·19	·73	2·07	4·23	·44	4·29	·24	4·90	4·28	1·63	33·65
,, ,,	10	Ilkley (Spence's Garden)	7·63	4·84	3·19	1·11	1·61	5·03	1·09	4·25	·73	5·52	5·26	2·20	42·46

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County and River Division.		Station.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
			in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.
Yorkshire, W.R.	10	York (Cherry Hill)	4·85	1·12	1·86	·90	1·47	4·33	·54	3·54	·35	3·84	2·95	1·12	26·87
,, ,,	10	Buckden	13·58	7·71	5·87	1·01	1·76	8·26	2·80	7·26	1·25	8·64	9·29	4·62	72·05
,, ,,	11	Knaresborough (The Abbey)	5·70	2·58	2·65	·76	2·09	4·50	·69	3·84	·42	4·44	3·04	1·39	32·10
,, E.R.	2	Birdsall Gardens	6·08	1·94	3·25	1·18	1·54	4·17	·79	4·76	·58	4·12	3·12	2·19	33·72
,, ,,	3	Patrington (Rose Cottage)	3·55	1·54	2·08	·82	1·24	2·34	·39	3·76	·30	3·31	2·35	1·41	23·09
,, ,,	3	Holme-on-Spalding Moor	4·87	1·70	2·34	1·02	·98	3·93	·65	3·56	·24	3·09	2·67	1·57	26·62
,, ,,	3	Beverley (E. Riding Mental Hosp.)	5·50	1·74	2·30	·78	1·01	3·19	·41	4·48	·47	4·28	3·01	1·98	29·15
,, ,,	4	Bridlington (Corpn. Nurseries)	3·99	1·56	2·89	1·50	1·46	4·10	·57	3·52	·50	3·01	2·60	1·58	27·28
,, N.R.	1	Masham Moor (Roundhill Res.)	9·23	4·57	4·54	1·08	3·03	5·34	1·16	5·41	·56	6·82	6·01	2·71	50·46
,, ,,	2	Felixkirk (Mount St. John)	4·04	1·31	2·70	·90	1·46	4·06	·61	5·10	·46	3·63	2·38	1·56	28·21
,, ,,	2	Reeth (Arkengarthdale)	9·31	5·03	4·20	·60	1·81	7·05	·51	7·70	1·43	6·64	7·39	2·85	54·52
,, ,,	4	Thornton Dale (High Dalby Ho.)	4·87	1·57	3·29	1·64	1·45	3·94	·76	3·56	·41	4·52	3·43	1·87	31·31
,, ,,	5	Whitby (Mulgrave Castle)	4·04	1·28	2·48	1·46	1·36	4·64	·83	4·14	·74	3·69	2·30	1·05	28·01
,, ,,	6	Middlesbrough (Albert Park)	2·73	·99	2·12	·78	1·19	5·14	1·17	3·42	·53	2·56	2·17	1·19	23·99
Durham	2	Burnhope (Lodgegill Mine)	13·20	5·20	6·60	1·30	1·85	8·90	3·80	10·35	3·10	8·40	10·50	4·25	77·45
,,	2	Durham (Houghall)	2·83	1·39	2·65	1·09	1·91	4·73	1·56	2·72	·53	2·88	2·41	1·52	26·22
,,	2	Weardale W.W. (Waskerley)	4·57	1·68	3·05	·81	1·98	5·03	1·62	4·61	1·23	4·84	4·19	1·59	35·20
,,	2	Sunderland (W. Hendon Ho.)	2·37	1·13	2·33	1·13	1·31	4·52	1·59	3·33	1·13	2·83	2·53	1·35	25·55
Northumberland	3	Corbridge (Howden Dene)	2·95	1·90	2·97	·74	1·54	3·45	1·26	3·45	1·07	3·57	2·92	1·96	27·78
,,	4	Bellingham (High Green Manor)	5·92	2·48	4·50	·93	1·32	5·24	2·04	3·48	1·60	4·08	4·06	3·29	38·94
,,	5	Morpeth (Cockle Park)	3·48	·96	2·65	1·07	1·33	4·40	1·36	2·94	·95	2·97	2·64	1·99	26·74
,,	5	Fontburn Res. (Tynemouth W.W.)	4·06	1·66	3·38	1·05	1·52	4·79	1·59	2·47	1·34	3·49	3·14	3·10	31·59
,,	6	Wooperton	4·72	1·68	3·94	1·24	1·60	5·58	1·60	4·59	1·47	3·54	3·86	2·09	35·91
,,	6	Ilderton (Lilburn Tower Gdns.)	4·51	1·84	3·81	1·43	1·42	5·94	1·08	4·47	1·15	3·37	3·77	2·29	35·08
Cumberland	1	Penrith (Laurel Bank)	6·31	3·72	3·67	·80	1·41	4·71	3·44	6·99	1·72	6·30	5·66	2·59	47·32
,,	1	Geltsdale	6·18	3·36	3·26	·60	1·56	5·56	5·03	7·81	2·29	5·85	5·43	2·97	49·90
,,	1	Carlisle (Scaleby Hall)	6·90	3·61	2·65	·95	1·23	4·93	3·94	6·52	1·85	4·45	4·34	2·21	43·58
,,	2	Borrowdale (Seathwaite)	35·00	15·19	10·68	6·26	1·26	13·77	15·86	14·74	10·50	20·00	26·60	12·29	182·15
,,	2	Keswick (Derwent Island)	14·21	6·39	4·48	1·78	1·72	6·97	5·74	8·65	3·62	9·62	11·56	5·60	80·34
,,	3	St. Bees (Bickerley House)	9·74	3·62	4·04	1·33	1·16	4·42	5·50	7·95	3·24	7·81	7·81	3·82	60·44
Westmorland	1	Kirkby Stephen (Redman Ho.)	10·01	4·89	4·66	·84	1·02	6·19	2·90	10·71	1·88	6·80	6·75	3·88	60·53
,,	1	Appleby (Castle Bank)	8·21	4·36	4·08	1·04	2·10	5·77	3·48	8·89	1·57	5·16	5·64	1·61	51·91
,,	3	Kendal (Highgate)	14·68	7·14	5·59	2·14	·72	7·46	8·35	8·37	4·27	8·43	10·38	5·01	82·54

Table XX.—(*con.*) *Monthly Rainfall*—**MONMOUTH AND WALES, AND THE ISLANDS.**

County and River Division.		Station.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
			in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.
Monmouth	3	Newport W.W. (Nantypridd)	9·08	4·73	5·01	1·52	·75	2·77	3·26	4·77	·86	8·46	5·92	4·57	51·70
,, ...	3	Abergavenny (The Chain)	6·08	3·54	5·24	1·16	·70	2·23	1·22	2·45	1·02	7·48	5·18	4·43	40·73
Glamorgan	3	Swansea (Victoria Park)	10·81	6·22	4·19	1·21	1·14	5·33	3·53	4·01	1·61	10·77	6·85	5·64	61·31
,, ...	5	Bridgend (Highmead).....	9·70	5·13	4·49	1·17	·70	4·13	2·23	3·57	1·73	8·48	5·07	4·55	50·95
,, ...	6	Treherbert (Tyn-y-waun).....	22·16	14·33	9·10	2·60	·67	8·22	5·38	7·98	2·33	18·42	18·24	11·44	120·87
,, ...	7	Cardiff (Roath Park)	8·94	4·83	4·73	1·74	·90	2·69	2·42	3·83	·73	7·18	4·42	4·62	47·03
Carmarthen	2	Carmarthen (The Friary)	10·77	5·23	4·16	1·65	·92	6·08	3·27	4·78	1·59	8·58	8·78	6·84	62·65
,, ...	2	Llanwrda (Dolaucothy).....	12·63	5·62	4·80	2·30	1·10	7·77	3·14	6·64	1·96	10·65	11·04	5·57	73·22
Pembroke	4	Saundersfoot (Hean Castle)	8·34	3·86	4·46	1·28	1·06	5·10	2·05	3·28	2·13	9·14	5·52	5·46	51·68
,, ...	4	Haverfordwest (Grammar School)	7·89	4·69	5·85	1·43	·95	5·04	3·28	3·95	1·90	9·70	7·27	8·49	60·44
,, ...	4	Fishguard (Langton, Dwrbach) ..	7·87	3·51	3·92	1·29	·66	4·44	2·48	3·05	1·98	7·31	6·45	5·46	48·42
Cardigan	2	Aberystwyth (Plant Breeding Stn.)	7·44	3·84	1·99	1·14	·67	5·62	3·89	6·73	2·15	6·62	6·96	4·16	51·21
,, ...	3	Cardigan (County School)	7·31	3·50	3·68	1·01	·72	4·26	2·55	2·55	1·43	7·50	6·12	5·18	45·81
,, ...	3	Lampeter (Falcondale).....	10·15	5·51	3·59	1·88	1·07	6·88	2·93	5·24	1·79	8·09	9·28	5·26	61·67
,, ...	5	Plynlimon.....	15·40	14·00	4·40	4·00	1·90	14·20	8·20	10·60	3·00	13·20	13·80	9·00	111·70
Brecon	7	Swansea W.W. (Cray Res.) No. 1	17 14	10·17	8·08	3·12	·45	8·64	4·46	8·31	2·56	13·70	14·32	8·43	99·38
,, ...	8	Birmingham W.W.(Cors-yr-hwch)	19·17	10·80	6·00	3·05	1·34	10·55	5·84	9·70	2·84	11·92	17·85	7·05	106·11
Radnor	1	Llandrindod Wells (Disserth Rec.)	9·21	4·57	3·03	1·38	·92	4·92	2·56	5·70	1·72	6·35	9·00	3·45	52·81
Montgomery....	4	Llandinam (Plas Dinam).....	7·66	4·80	3·24	2·35	1·13	5·07	2·69	4·16	1·35	5·04	6·99	3·57	48·05
,, ...	5	Llandysilio Rectory	5·50	3·28	1·79	·92	1·28	3·53	1·40	(4·00)	1·87	3·62	4·28	1·85	(33·32)
,, ...	5	Lake Vyrnwy.....	16·24	10·68	4·08	2·67	1·49	6·36	2·01	7·41	1·98	9·34	13·83	5·75	81·84
Flint	2	Rhyl Sewage Works	4·06	2·70	1·35	·93	1·54	3·78	·93	2·18	1·41	3·39	3·53	1·87	27·67
Denbigh	1	Wrexham (Packsaddle Res.)	4·98	2·85	2·92	1·85	1·36	3·85	1·47	2·44	1·90	5·18	5·95	2·89	37·64
,, ...	2	Llangynhafal (Plâs Drâw)	4·45	2·61	1·60	1·22	2·78	4·11	1·04	3·31	3·25	4·33	4·88	2·51	36·09
,, ...	3	Pentre Voelas (Voelas Hall)	11·71	7·86	3·65	2·22	1·80	8·31	2·60	5·15	2·22	9·20	12·27	4·53	71·52
Merioneth	4	Dolgelly (Bryntirion)	10·80	7·43	2·80	2·96	1·18	7·96	6·81	7·80	1·81	8·69	10·14	5·45	73·83
,, ...	4	Trawsfynydd Camp	13·73	9·37	4·70	2·86	1·20	7·82	5·05	7·83	1·51	10·27	14·51	5·55	84·40
Carnarvon	2	Llandudno	4·25	3·33	1·63	·85	·95	3·93	1·08	2·48	1·28	3·76	3·55	2·70	29·79
,, ...	3	Bethesda (Penrhyn Quarries)	12·00	8·01	5·61	2·54	2·32	9·67	4·27	7·43	2·38	10·25	12·13	5·32	81·93
,, ...	4	Abersoch.....	7·47	4·20	2·65	1·40	1·09	5·82	2·69	4·66	1·95	6·23	6·35	4·20	48·71
,, ...	5	Snowdon (Cwm Dyli)	27·06	17·19	7·85	4·71	2·72	19·12	11·10	12·48	3·73	17·04	24·93	12·14	160·07

Table XX.—(*con.*) *Monthly Rainfall*—**MONMOUTH AND WALES**—(*con.*)

County and River Division.	Station.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
		in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.
Anglesey	Holyhead (Salt Island).....	6·03	3·58	2·88	·80	1·28	4·06	1·79	2·96	1·51	5·84	6·04	3·93	40·70
,, ...	Llanerchymedd (Llwydiarth Esgb)	6·52	4·19	2·76	1·28	1·56	5·54	2·18	3·91	1·91	5·02	6·57	4·59	46·03
	ISLE OF MAN.													
Isle of Man	Douglas (Borough Cemetery)	7·93	3·72	4·10	1·66	1·33	6·57	3·09	5·26	2·61	8·75	7·95	4·41	57·38
,, ...	Ramsey (North Promenade)	9·37	3·45	7·95	1·71	·95	5·42	2·64	7·46	1·93	11·31	7·97	5·19	65·35
	CHANNEL ISLANDS.													
Jersey	St. Aubins (Belle Vue)	5·53	4·18	2·79	2·67	5·31	2·41	·84	2·77	2·45	6·96	4·17	4·39	44·47
Guernsey	St. Martin's (Les Blanches)	6·01	4·18	3·33	3·15	3·37	3·07	·63	2·03	1·41	7·16	4·15	3·81	42·30
Sark	Pointe Robert	6·53	3·59	2·78	2·46	2·56	2·60	·95	1·92	1·17	6·10	3·53	3·73	37·92
Alderney	St. Anne (Grosnez House)	5·48	3·41	3·33	2·95	2·71	2·60	·63	1·78	1·61	6·95	4·56	3·12	39·13
	SCOTLAND.													
Wigtownshire .. 3	Whithorn (Glasserton)	7·63	3·47	4·62	1·36	(2·19)	5·85	3·34	4·65	1·91	9·35	6·86	4·03	55·26
,, .. 3	Stoneykirk (Ardwell House)	7·05	3·34	4·73	2·38	1·44	5·47	1·60	3·51	2·12	7·79	6·52	4·44	50·39
,, .. 4	Kirkcowan (Craighlaw)	11·57	4·17	4·73	2·03	1·70	5·66	3·13	6·30	2·73	9·55	9·26	5·33	66·16
Kirkcudbrightsh'e 3	Dalry (Glendarroch)	13·36	5·23	7·23	2·31	1·93	6·57	2·34	8·41	2·40	11·08	8·88	5·84	75·58
,, 4	Dalbeattie (Kirkennan)	12·21	3·64	5·87	1·75	2·28	6·88	3·48	6·43	2·72	9·83	8·29	5·34	68·72
Dumfriesshire .. 3	Moniaive (Glencrosh)	11·24	4·70	5·93	2·40	1·58	7·04	2·45	7·65	2·82	10·12	7·63	5·44	69·00
,, .. 4	Dalton (Kirkwood)	9·64	4·23	5·94	1·18	1·62	7·07	4·80	8·24	2·79	8·50	6·33	4·72	65·06
,, .. 5	Langholm (Ewes, Sandyhaugh) ..	13·08	7·27	7·11	1·46	1·73	7·66	4·61	9·85	2·81	10·48	9·00	5·85	80·91
,, .. 5	Eskdalemuir Observatory	15·52	8·51	6·63	1·78	1·54	7·87	5·24	9·48	4·37	11·83	8·82	5·90	87·49
Roxburghshire.. 3	Jedburgh (Jedneuk)	3·57	1·92	3·10	·75	1·39	4·38	1·48	3·75	1·51	3·25	2·17	1·33	28·60
Selkirkshire 2	Ettrick Manse	14·96	7·40	7·06	1·57	1·99	7·57	3·64	8·35	3·76	11·07	8·15	5·25	80·77
,, ... 4	Caddonfoot (Fairnilee)	6·51	3·87	4·63	·79	1·45	4·73	1·51	5·33	1·50	6·19	4·05	2·55	43·11
Peeblesshire 2	Stobo Castle	10·48	4·06	4·09	1·23	1·50	4·18	2·34	4·02	2·25	5·26	3·70	2·53	45·64
Berwickshire ... 2	Earnscleugh Burn (Blythe Rig) ..	5·83	2·56	5·79	1·75	1·79	5·63	1·69	6·65	2·55	5·18	5·10	2·76	47·28
,, ... 4	Marchmont House	4·64	2·56	4·12	1·45	1·13	5·39	1·58	4·40	1·51	3·86	3·42	1·99	36·05
Haddingtonshire 5	North Berwick Reservoir.....	2·78	1·31	1·78	·64	1·30	4·35	1·93	4·27	2·25	2·74	2·48	1·79	27·62
Midlothianshire 5	Pentland Hills (Harperrig)	8·35	3·63	3·38	1·29	1·77	5·36	3·22	5·49	3·86	5·44	4·40	3·40	49·59

Table XX.—(*con.*) *Monthly Rainfall*—**SCOTLAND**—(*con.*)

County and River Division.		Station.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
			in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.
Midlothianshire	5	Edinburgh (Royal Observatory)..	4·91	2·57	1·48	·56	1·43	5·18	2·11	4·85	2·17	3·00	2·98	1·85	33·09
Lanarkshire	4	Gartcosh (Gartloch Hospital) ..	8·58	4·65	2·93	1·07	2·33	4·82	2·10	3·65	2·97	5·45	4·06	3·72	46·33
,, ...	5	Douglas (Kilncroft)	12·11	5·72	3·32	1·69	2·08	5·59	2·95	5·66	3·41	6·34	5·85	3·69	58·41
,, ...	5	Strathaven (East Overton Ho.) ..	12·53	5·71	1·78	1·26	1·83	4·68	3·30	4·60	3·75	6·51	5·53	4·39	55·87
Ayrshire	3	Dalry (Munnock Reservoir).....	10·31	3·82	5·03	1·94	1·98	5·37	3·16	4·74	4·34	8·93	6·69	4·61	60·92
,, ...	6	Maybole (Culzean Castle Gardens)	9·25	3·49	3·03	1·12	1·70	4·13	2·62	3·17	4·97	6·95	5·97	3·58	49·98
,, ...	8	Colmonell (Knockdolian)	8·23	2·95	6·29	2·49	1·49	4·39	2·35	4·05	3·10	7·94	7·07	6·10	56·45
,, ...	13	Glen Afton (Ayr Sanatorium) ...	13·28	5·19	6·70	2·44	1·45	5·05	3·45	5·09	3·88	10·50	8·48	6·01	71·52
Renfrewshire ..	2	Houston Manse	12·39	6·03	4·97	2·06	2·38	6·15	3·33	4·45	4·06	8·80	8·06	6·74	69·42
Dumbartonshire	2	Cardross (Kilmahew)	10·38	4·59	6·24	2·64	2·34	6·06	3·00	4·46	3·94	7·95	7·05	5·11	63·76
Stirlingshire	1	Falkirk (Westbank Garden)	8·28	5·46	3·04	1·07	1·82	5·48	2·31	4·39	3·24	5·34	4·81	4·20	49·44
Buteshire	1	Rothesay (Ardencraig)	10·44	5·46	5·37	2·63	2·35	6·19	4·13	4·98	4·79	10·32	9·20	6·86	72·72
,, ...	3	Arran (Dougarie Lodge).....	10·56	4·72	4·86	2·36	1·72	4·26	2·27	4·50	3·64	8·68	7·82	6·58	61·97
Argyllshire	2	Acharacle (Shielbridge)	12·62	6·64	6·88	3·91	·72	3·84	6·70	4·90	5·75	9·37	10·00	9·12	80·45
,, ...	3	Morvern (Kingairloch)	25·31	9·79	9·29	5·83	1·20	6·95	7·73	9·21	7·38	13·60	16·74	12·14	125·17
,, ...	5	Glen Etive	22·81	14·83	7·58	5·27	·98	8·30	9·78	8·25	6·59	15·68	16·31	5·69	122·07
,, ...	6	Loch Awe (Ford)	14·92	6·48	5·13	3·86	1·30	4·70	5·83	5·02	5·33	9·35	8·04	7·79	77·75
,, ...	6	Dalmally (Manse of Glenorchy) ..	18·88	10·45	6·72	3·74	1·40	6·27	7·95	7·30	6·88	11·65	11·24	8·10	100·58
,, ...	7	Oban	10·78	5·20	3·52	2·95	·94	5·17	4·77	5·37	5·11	8·69	9·56	6·78	68·84
,, ...	9	Muasdale (Grianan)	8·78	4·46	4·46	2·42	1·46	5·36	2·77	4·42	4·11	7·19	7·24	7·44	60·11
,, ...	10	Skipness Castle	9·43	4·88	3·81	3·31	2·02	5·75	(2·29)	(5·52)	(4·75)	(8·03)	(7.86)	(5·87)	(63·52)
,, ...	11	Ardrishaig (Canal Office)	13·40	5·62	5·36	4·16	1·51	5·50	4·48	5·31	5·51	10·69	11·88	8·74	82·16
,, ...	11	Ardkinglas	20·04	8·24	8·71	5·01	1·04	5·28	6·81	6·61	6·65	11·70	12·88	9·70	102·67
,, ...	12	Loch Eck (Benmore)	22·55	10·13	12·26	5·74	2·47	7·97	5·58	7·61	6·98	14·95	15·45	12·28	123·97
,, ...	14	Islay (Eallabus)	10·42	5·20	5·03	2·62	1·27	4·46	4·09	5·42	5·05	10·55	9·30	8·65	72·06
,, ...	14	Jura (Ardfin)	11·56	5·47	4·94	3·17	2·34	6·71	4·32	6·49	5·72	9·49	10·99	9·36	80·56
,, ...	14	Mull (Iona Manse).....	8·36	4·06	4·40	2·45	·82	3·61	3·15	3·48	3·10	7·04	6·94	6·68	54·09
,, ...	14	Mull (Benmore).....	22·20	12·80	10·30	8·70	3·20	9·30	14·10	10·20	14·40	13·50	19·10	23·00	160·80
,, ...	14	Mull (Glencannel)	20·27	9·02	11·99	7·70	1·33	5·51	9·68	8·20	7·28	14·96	13·80	17·93	127·67
,, ...	14	Tiree (Cornaigmore Sch.)	8·01	3·61	5·07	2·15	·96	2·58	2·41	3·35	3·52	6·56	6·28	6·08	50·58
Fifeshire	2	Kirkcaldy (Munro Street)	5·41	2·62	2·27	·88	1·37	5·24	1·81	4·75	2·80	3·21	3·10	2·78	36·24
,, ...	3	Cupar (Fife & Kinross Asylum) ..	6·49	1·98	4·29	·79	1·43	4·93	·82	5·17	2·40	4·15	3·25	3·50	39·20

Table XX.—(*con.*) *Monthly Rainfall*—**SCOTLAND**—(*con.*)

County and River Division.		Station.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
			in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.
Perthshire	2	Loch Drunkie	17·80	5·80	7·45	3·60	1·60	6·95	4·25	7·10	5·60	11·10	9·20	8·90	89·35
,,	3	Glengyle	22·10	11·40	14·00	5·60	1·75	7·80	7·20	9·50	6·95	14·40	13·50	13·00	127·20
,,	4	Glendevon (Tormaukin)	13·86	7·50	4·94	1·70	2·09	5·97	3·27	6·71	5·16	8·80	7·03	6·78	73·81
,,	7	Lochearnhead (Edenchip)	16·60	8·49	11·38	5·25	1·74	5·85	3·73	6·67	5·32	11·18	7·77	7·93	91·91
,,	7	Crieff (Strathearn Hydro)	10·16	3·54	6·39	1·58	2·18	4·46	1·55	6·04	3·67	6·17	5·02	4·68	55·44
,,	11	Aberfeldy (Dall Avon)	9·69	4·08	8·08	1·55	1·26	3·32	1·21	5·05	3·48	6·55	4·28	4·16	52·71
,,	14	Loch Rannoch (Dall)	14·14	6·28	6·34	2·62	·98	4·12	1·91	5·11	4·22	7·21	4·99	4·82	62·74
,,	14	Glen Bruar (Bruar Lodge)	9·22	5·30	5·01	1·52	2·30	4·62	2·61	6·73	4·64	7·39	6·74	4·41	60·49
,,	15	Kirkmichael (Ballintuim Ho.)	9·69	3·06	7·66	1·77	1·39	2·73	1·31	5·10	3·58	6·47	5·01	3·96	51·73
Angus (Forfar)	1	Kettins School	6·61	2·10	5·56	1·18	1·74	3·09	·65	4·01	2·61	4·62	3·35	3·09	38·61
,,	3	Arbroath (W. Cemetery)	4·00	·93	3·04	·65	1·34	4·60	1·36	4·28	2·37	3·11	2·72	2·23	30·63
,,	3	Glen Prosen (Pearsie House)	6·73	2·48	6·23	1·43	1·49	2·65	1·85	6·98	2·97	4·71	3·80	3·15	44·47
Kincardineshire	1	Marykirk (Balmakewan)	4·74	1·34	4·76	1·45	1·20	3·01	1·90	4·94	2·47	3·28	2·93	3·11	35·13
,,	3	Strachan (Bridge of Dye)	7·40	1·51	6·42	2·46	1·92	4·17	2·54	5·99	3·24	5·02	4·69	4·40	49·76
Aberdeenshire	1	Glen Muick	8·24	2·67	10·06	1·78	2·48	4·29	2·05	6·29	4·62	6·37	4·98	2·42	56·25
,,	1	Ballater (Irrigation Farm)	3·48	·91	4·97	·97	1·59	2·97	2·12	4·05	2·91	3·28	2·53	2·49	32·27
,,	2	Aberdeen (King's College)	3·80	·64	3·57	2·57	1·60	3·28	2·09	2·31	2·66	2·83	3·93	2·80	32·08
,,	2	Strathdon (Estate Office)	3·08	1·03	3·14	1·03	1·69	3·28	1·70	4·26	2·79	2·90	3·96	2·29	31·15
,,	2	Craibstone (Woodlands Field)	4·11	·66	3·69	2·29	1·70	3·04	1·67	3·04	2·78	2·46	3·65	2·80	31·89
,,	3	Haddo House	3·17	·58	2·80	2·20	1·59	2·43	1·80	2·47	2·90	2·45	4·00	2·93	29·32
,,	4	Peterhead (Forehill Works)	3·98	·62	2·29	2·08	1·94	2·40	1·52	1·57	3·40	2·87	4·04	3·19	29·90
,,	5	Huntly (Cruchie)	2·56	·71	2·19	1·49	1·96	3·32	2·10	3·29	3·59	2·71	4·11	2·89	30·92
Banffshire	2	Turriff (Forglen Gardens)	2·99	1·01	2·01	1·95	1·63	3·16	2·16	2·68	3·26	2·34	4·31	2·94	30·44
Morayshire	2	Gordon Castle	2·96	·91	1·66	·81	1·38	3·57	2·71	3·20	3·55	1·89	3·87	2·12	28·63
,,	3	Grantown-on-Spey	3·71	1·53	1·68	1·20	2·55	2·98	2·95	4·55	3·99	2·11	3·54	2·29	33·08
,,	3	Aberlour (Wester Elchies)	2·74	1·06	1·99	1·46	2·75	4·28	2·80	4·10	4·01	2·77	4·17	2·50	34·63
Nairnshire	2	Nairn (Achareidh)	3·14	1·85	1·66	·77	1·86	2·98	1·84	3·01	3·33	2·28	3·40	1·96	28·08
Inverness-shire	3	Cluny Castle	9·91	5·76	3·22	1·69	1·16	4·07	2·27	5·11	4·39	5·71	6·65	3·81	53·75
,,	3	Alvie Manse	6·41	3·62	2·07	1·06	2·27	3·56	1·98	3·91	3·81	4·46	5·12	2·46	40·73
,,	6	Fort Augustus (St. Benedict's)	12·08	9·65	2·60	1·36	1·64	3·44	3·36	3·78	4·18	6·79	6·51	4·95	60·34
,,	6	Loch Ness (Foyers)	9·28	5·44	1·78	1·43	1·62	3·35	2·21	3·88	3·35	5·25	6·56	5·43	48·68
,,	7	Loch Quoich (Loan)	24·00	17·30	8·00	5·20	1·40	10·10	16·30	7·00	8·10	17·00	14·40	13·00	141·80

Table XX.—(*con.*) *Monthly Rainfall*—**SCOTLAND**—(*con.*)

County and River Division.	Station.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
		in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.
Inverness-shire..12	Loch Nevis (Inverie Gdns.).....	15·71	8·48	6·80	3·70	1·20	5·60	10·60	4·46	5·80	11·33	9·56	10·33	93·57
,, ..13	Arisaig House	10·35	5·00	5·30	2·76	1·28	4·63	6·48	4·20	4·54	8·29	8·53	6·94	68·30
,, ..17	Glenleven (Corrour Station)	19·15	11·61	4·00	3·10	1·13	6·87	5·70	6·35	6·53	12·05	10·63	7·38	94·50
,, ..17	Fort William	16·75	10·40	6·03	4·19	·85	4·70	7·52	5·71	6·28	10·53	11·34	7·77	92·07
,, ..18	Hyskier	8·87	3·43	5·30	2·56	·99	3·41	2·19	3·17	3·91	8·81	6·80	5·41	54·85
,, ..18	Skye (Kyleakin, Dunringell)	14·90	7·41	6·15	4·46	·78	3·60	6·19	3·40	5·86	7·83	8·78	10·01	79·37
,, ..18	Skye (Portree)	13·14	6·23	5·80	3·73	1·53	5·67	6·48	4·01	6·20	10·83	9·35	9·18	82·15
,, ..18	Skye (Dunvegan)	12·06	5·59	5·57	3·21	1·85	4·98	4·97	4·31	4·99	9·68	9·97	8·47	75·65
Ross & Cromarty 4	Strathpeffer	6·04	4·67	2·40	1·22	1·44	2·57	1·62	3·91	2·31	3·48	4·81	3·80	38·27
,, 4	Cromarty House	3·43	2·00	1·67	·91	2·22	2·75	1·67	2·74	2·35	2·20	3·15	2·20	27·29
,, 4	Alness (Ardross Castle)	6·71	4·53	3·89	1·64	3·17	3·29	1·93	5·26	2·71	4·39	5·35	4·28	47·15
,, 7	Braemore (Loch a' Bhraoin)	11·43	8·39	2·72	2·51	2·96	6·26	5·21	5·51	4·86	6·94	12·46	8·40	77·65
,, 7	Ullapool	8·81	6·20	2·80	2·12	1·37	3·45	4·19	3·53	3·07	3·92	6·05	5·15	50·66
,, 8	Loch Torridon (Bendamph)	17·55	9·60	5·73	4·61	2·41	5·58	6·80	4·49	5·79	9·09	11·68	10·49	93·82
,, 9	Loch Carron (Dunhulladale)	12·87	7·63	4·24	3·03	1·56	5·02	7·70	4·66	4·89	9·79	9·34	7·88	78·61
,, 10	Stornoway (Leurbost School)....	11·43	5·25	3·71	2·23	1·80	2·21	3·06	2·52	2·82	4·64	5·40	5·09	50·16
,, 10	Stornoway	10·56	5·48	3·48	2·44	1·81	3·30	3·05	2·19	3·03	5·07	6·75	5·53	52·69
Sutherlandshire 1	Lairg	6·98	5·16	2·53	1·30	1·39	2·70	2·47	2·86	1·57	4·41	4·70	5·21	41·28
,, 2	Golspie (Technical School)	4·16	2·16	1·77	1·23	1·91	2·85	2·76	2·81	1·79	3·35	3·84	2·72	31·35
,, 4	Tongue	7·61	4·39	2·71	1·81	1·86	3·56	2·14	3·28	2·57	3·43	5·42	3·44	42·22
,, 4	Melvich (The Cottage)	5·03	3·43	1·92	1·38	1·43	4·27	2·85	2·51	2·82	4·29	5·74	6·58	42·25
,, 5	Loch More (Achfary)	13·77	9·38	3·66	3·00	3·66	5·47	8·78	5·52	4·69	6·88	13·01	8·37	86·19
Caithness-shire.. 2	Wick	4·70	1·69	1·69	1·60	1·48	3·11	2·17	2·01	2·39	2·53	4·58	3·52	31·47
,, .. 3	Altnabreac	4·56	1·57	2·92	1·34	1·71	2·93	2·10	3·73	2·03	3·53	4·34	(3·38)	34·14
,, .. 3	Thurso (Buckies)	4·59	3·11	2·20	1·33	2·15	3·89	3·68	2·60	2·50	3·06	5·58	5·05	39·74
Orkney	Pomona (Deerness)	5·18	3·40	2·35	1·61	1·51	1·90	2·31	1·35	2·22	3·78	4·28	4·05	33·94
Shetland	Lerwick Observatory	6·00	4·13	2·68	1·89	1·55	3·38	2·13	3·47	2·57	5·57	5·30	5·23	43·90

Table XX.—(*con.*) *Monthly Rainfall*—**IRELAND.**

County and River Division.	Station.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
		in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.
Co. Cork 4	Garinish Island	15·01	10·73	6·87	5·79	3·60	9·38	3·73	6·77	4·14	11·88	12·59	9·92	100·41
,, ... 6	Castletownshend (Seafield)	8·18	5·18	6·32	3·53	2·33	7·12	2·26	4·67	2·18	8·05	6·96	7·05	63·83
,, ... 6	Dunmanway (The Rectory).....	10·21	6·81	6·79	5·82	2·31	7·57	2·22	5·12	3·69	9·58	8·10	7·76	75·98
,, ... 7	Cork (University College).....	5·39	3·42	7·33	5·66	2·60	5·60	1·01	5·04	2·26	6·41	5·33	5·61	55·66
,, ... 7	Midleton (Ballinacurra)	4·14	2·92	5·91	6·05	2·45	5·24	1·18	6·21	2·17	7·08	4·58	4·81	52·74
,, ... 9	Mallow (Longueville)	5·35	3·78	5·59	5·00	2·40	3·74	·61	3·34	1·88	6·05	4·64	4·68	47·06
,, ... 9	Kanturk (Castlecor)	5·46	4·64	5·21	4·31	2·10	4·36	·96	4·12	2·14	7·03	5·09	4·59	50·01
Co. Kerry 2	Tralee (Technical Sch.)	4·20	2·68	3·70	3·90	·71	4·69	1·49	5·49	4·79	6·04	3·61	6·48	47·78
,, ... 3	Cahirciveen (Valentia Obs.)	8·14	4·69	5·40	5·00	2·42	5·84	2·00	8·68	4·70	8·99	7·33	6·93	70·12
,, ... 3	Killarney (District Asylum)	9·54	4·85	5·33	5·16	1·29	4·29	1·81	4·57	3·53	7·78	6·62	6·05	60·82
,, ... 3	Killorglin (Callinafercy)	8·20	5·92	4·78	4·16	·63	5·69	2·47	5·68	4·08	7·91	7·48	5·16	62·16
,, ... 4	Darrynane Abbey	7·82	5·60	5·73	5·26	2·13	6·22	2·31	6·83	2·98	8·68	6·05	6·28	65·89
,, ... 4	Kenmare (Dromore Castle)	12·26	9·32	7·66	6·83	2·21	8·06	4·09	5·80	4·34	12·08	10·91	8·33	91·89
Co. Waterford .. 3	Waterford (Brook Lodge)	4·08	2·52	5·69	2·74	1·99	6·34	·93	4·55	1·49	7·41	5·77	4·15	47·66
,, .. 3	Carrick-on-Suir (Seskin)	5·88	4·23	8·20	3·51	2·04	4·77	·98	5·33	1·77	7·51	6·75	5·17	56·14
Co. Tipperary .. 1	Nenagh (Traverston)	7·71	5·63	5·42	3·75	1·65	4·95	2·04	5·01	1·94	7·25	6·54	5·99	57·88
,, .. 1	Nenagh (Castle Lough)	6·38	5·61	4·10	2·71	1·47	4·33	2·39	4·00	1·83	6·74	6·26	4·96	50·78
,, .. 3	Clonmel (Coolgreany)	4·75	3·40	5·00	4·40	1·38	4·36	·86	4·84	1·82	5·42	5·55	3·85	45·63
,, .. 3	Cashel (Ballinamona)	4·52	3·69	4·46	2·85	1·67	3·68	1·04	5·09	2·06	5·60	4·42	3·86	42·94
,, .. 4	Roscrea (Timoney Park)	4·71	4·34	3·78	1·70	1·45	4·72	·97	4·36	1·55	5·12	4·54	3·12	40·36
Co. Limerick .. 2	Abbeyfeale (Springmount School)	5·44	4·60	2·65	3·54	·86	5·21	1·69	3·84	2·63	6·34	5·76	5·71	48·27
,, .. 2	Knocklong (Kilfrush)	5·23	4·15	4·38	4·22	1·57	3·57	1·69	3·69	1·88	5·66	4·72	4·10	44·86
,, .. 2	Foynes (National School)	5·62	4·62	3·09	3·99	1·04	4·23	2·23	4·88	2·37	7·06	5·91	4·85	49·89
,, .. 2	Limerick (O'Connell Street).....	5·05	4·13	2·93	3·11	1·27	3·76	1·23	4·09	2·46	5·82	4·94	4·67	43·46
Co. Clare 2	Inagh (Mount Callan)	9·46	7·65	4·69	4·90	1·51	5·40	5·42	5·78	5·37	11·11	9·81	7·73	78·83
,, ... 3	Dromoland Castle	6·12	4·17	3·24	3·14	1·81	4·77	2·44	5·93	3·10	6·49	5·69	4·90	51·80
,, ... 3	Tuamgraney (Raheen Ho.)	6·03	6·55	4·45	2·91	1·14	4·48	2·91	4·52	2·18	8·66	7·10	5·40	56·33
Co. Wexford.... 2	Foulkesmill (Longraigue).....	5·65	3·00	6·55	2·99	2·69	6·89	1·84	5·51	1·28	8·38	5·91	4·81	55·50
,, ... 3	Johnstown Castle	4·76	2·58	6·61	3·47	2·50	6·17	1·83	4·33	1·09	6·63	5·66	4·91	50·54
,, ... 3	Enniscorthy (Woodbrook)	7·96	4·34	10·01	3·33	1·96	7·08	1·45	7·29	1·31	9·11	6·36	5·08	65·28
,, ... 4	Gorey (Courtown House)	5·02	2·95	8·56	2·44	1·15	5·57	1·29	6·18	·75	5·82	6·76	4·13	50·62
Co. Kilkenny .. 2	Kilkenny Castle.....	4·19	3·11	4·38	2·11	1·51	3·89	·74	4·74	1·52	5·22	4·11	3·45	38·97

Table XX.– (*con.*) *Monthly Rainfall*—**IRELAND**—(*con.*)

County and River Division.		Station.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
			in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.
Co. Wicklow....	3	Rathdrum (Avondale)	6·46	4·01	10·70	3·51	1·45	6·77	1·53	5·20	·71	6·91	7·50	5·47	60·22
,, ...	4	Greystones (Rathdown)	4·35	3·57	8·49	2·11	·79	5·63	·68	6·55	·90	4·46	4·74	4·06	46·33
Co. Carlow	2	Bagnalstown (Fenagh House) ..	4·41	3·14	5·50	2·33	1·06	5·60	1·21	6·96	1·31	5·30	3·94	3·21	43·97
,, ...	3	Hacketstown Rectory	4·22	3·40	7·69	3·08	1·36	5·57	1·59	5·28	1·30	5·65	4·80	4·15	48·09
†Co. Leix	2	Abbey Leix (Blandsfort)	4·32	3·57	4·82	2·03	1·27	3·98	1·53	4·23	1·86	5·01	4·30	3·50	40·42
,,	3	Mountmellick (Summer Grove) ..	6·56	4·81	4·03	1·94	1·58	5·47	1·46	4·36	2·04	5·41	5·90	4·18	47·74
*Co. Offaly	1	Birr Castle	3·89	3·89	3·24	1·84	2·17	4·35	2·11	4·10	1·55	5·43	3·91	3·52	40·00
Co. Kildare	2	Straffan House	3·91	3·73	3·42	1·32	1·09	4·58	1·53	3·75	1·77	3·81	3·74	3·28	35·93
Co. Dublin	2	Howth Castle	2·76	2·60	4·16	1·46	1·24	4·75	1·26	2·82	·66	3·13	4·06	2·75	31·65
,, ...	3	Balbriggan (Ardgillan)	3·52	2·90	4·18	1·39	1·13	4·42	1·30	3·25	1·21	3·72	4·13	3·80	34·95
Co. Meath	2	Dunboyne (Stirling, Clonee)	3·63	3·36	3·87	·68	1·55	5·06	1·95	4·82	1·17	3·47	3·77	3·17	36·50
,, ...	4	Summerhill House	4·80	3·49	4·50	1·28	1·55	4·56	2·22	3·60	1·98	4·23	3·95	3·14	39·30
,, ...	4	Kells (Headfort)	4·66	4·13	3·96	1·70	1·38	5·50	1·99	5·71	2·79	5·57	5·49	3·64	46·52
Co. Westmeath	1	Moate (Coolatore)	3·84	3·18	2·97	1·55	1·74	5·75	1·63	4·23	2·15	5·11	3·92	3·13	39·20
,,	1	Mullingar (Belvedere House)	4·98	3·75	3·06	1·41	1·90	6·15	2·02	5·24	2·26	4·94	5·29	3·80	44·80
,,	1	Mullingar (Ballynegall Gdns.) ..	5·39	4·40	3·46	1·92	1·68	5·71	2·82	4·94	2·23	5·57	5·65	4·17	47·94
,, ..	1	Castlepollard (Pakenham Hall) ..	5·05	3·88	2·26	1·97	1·53	6·71	2·50	4·61	2·80	5·09	5·40	2·87	44·67
Co. Louth	2	Dundalk (Aughneskea Reservoir)	5·48	5·03	3·46	2·03	1·99	4·18	2·53	4·53	2·47	5·41	6·09	4·44	47·64
,, ...	3	Greenore	5·44	4·96	2·69	1·31	1·17	3·70	1·84	3·09	2·37	4·50	4·53	3·08	38·68
Co. Longford ..	2	Ballymahon (New Castle)	4·83	3·65	3·12	1·58	1·30	6·66	2·12	3·97	2·24	5·09	4·81	3·03	42·40
,, ..	2	Castle Forbes Gardens	6·00	3·26	3·40	1·54	1·73	6·85	2·09	5·21	2·96	5·10	5·56	2·75	46·45
Co. Galway	3	Ballynahinch Castle	10·47	4·67	4·48	4·23	1·69	8·69	3·81	8·49	6·73	11·25	9·48	7·49	81·48
,, ...	3	Tuam (Gardenfield)	6·19	5·17	2·45	2·55	1·48	6·72	2·70	3·97	6·00	6·83	4·59	5·42	54·07
,, ...	5	Killmor (Ramore)	5·91	3·49	3·37	1·92	1·52	4·32	1·63	4·81	2·10	5·90	4·46	3·15	42·58
,, ...	5	Ahasciragh (Clonbrock)	(6·40)	(4·30)	(2·95)	(2·55)	(1·55)	6·52	1·85	4·85	2·61	6·23	6·33	3·55	(49·69)
Co. Roscommon	4	Strokestown (Castlenode)	5·48	3·13	3·91	1·90	1·82	7·65	20·2	4·72	3·04	5·48	5·32	3·23	47·70
,, ...	4	Boyle	5·32	2·74	2·94	1·67	1·29	5·56	2·60	5·75	3·37	5·75	4·65	2·74	44·38
Co. Mayo	2	Castlebar Rectory.....	10·14	4·01	3·96	2·81	1·48	7·13	2·50	6·17	4·62	9·11	6·88	4·85	63·66
,, ...	4	Westport House	7·60	3·03	3·46	2·75	·91	5·53	2·16	5·24	4·37	7·91	6·23	5·16	54·35
,, ...	4	Mallarany	12·67	6·21	3·31	3·01	1·24	7·07	4·74	6·56	7·73	9·70	8·47	7·99	78·70
,, ...	5	Aasleagh House.....	18·50	7·47	8·09	5·70	2·26	11·05	6·34	9·66	9·08	18·95	13·10	13·94	124·14
,, ...	6	Tourmakeady (Drimbaun)	12·53	4·75	3·11	3·00	1·12	6·10	1·81	5·89	4·86	10·28	7·76	8·83	70·04

† Formerly called Queen's County.

• Formerly called King's County.

Table XX.—(*con.*) *Monthly Rainfall*—**IRELAND**—(*con.*)

County and River Division.		Station.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
			in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.
Co. Sligo	2	Collooney (Markree Obsy)	7·48	3·93	3·57	1·78	1·32	6·90	1·95	6·07	3·82	7·56	5·64	4·85	54·87
,,	2	Sligo (Ard-na-veagh)	6·65	3·76	2·78	1·62	1·10	6·11	2·68	6·51	4·95	6·97	4·69	5·25	53·07
Co. Cavan	1	Crossdoney (Kevit Castle)	5·68	3·77	3·47	2·12	1·36	6·28	1·91	4·26	2·95	5·48	5·03	3·10	45·41
,,	1	Belturbet (Cloverhill)	4·94	3·13	3·20	2·11	1·66	4·59	2·23	5·07	2·16	4·14	4·57	2·14	39·94
,,	2	Glangevlin	11·11	4·81	6·74	3·84	2·11	9·33	2·64	6·70	4·65	11·07	8·38	8·08	79·46
Co. Fermanagh	1	Enniskillen (Portora School)	7·35	4·51	2·81	2·47	1·58	7·34	(1·86)	(6·18)	(3·58)	5·27	5·48	3·08	(51·51)
,,	1	Belleek (Heronshaw)	8·25	4·48	2·99	1·92	1·67	5·64	2·23	6·89	4·74	5·12	5·29	4·08	53·30
Co. Armagh	3	Lurgan (Belle Vue)	4·82	3·57	2·78	1·16	1·07	3·73	1·88	4·61	1·97	4·49	4·07	2·54	36·69
,,	5	Armagh Observatory	4·84	4·04	3·17	1·78	·80	4·18	1·59	6·86	2·11	4·70	4·26	2·45	40·78
Co. Down	1	Newry (Bridge Street House)	6·79	6·15	4·13	2·08	·67	4·27	2·43	4·42	2·79	5·82	6·48	4·83	50·86
,,	2	Seaforde	6·36	4·98	6·56	2·25	1·24	4·39	2·52	4·28	2·43	5·86	6·42	4·46	51·75
,,	4	Donaghadee (Coastguard Station)	5·47	3·11	4·44	1·96	1·13	3·79	2·62	4·37	2·42	5·59	4·96	3·45	43·31
Co. Antrim	1	Belfast (Queen's University)	6·25	4·79	3·88	1·64	1·36	4·02	2·71	3·02	2·42	5·69	5·47	3·95	45·19
,,	2	Larne (Sallagh Springs)	9·54	5·07	6·09	2·34	1·46	8·85	2·50	6·32	3·43	8·44	8·72	5·81	68·57
,,	2	Glenarm Castle	8·66	5·29	5·90	2·27	1·15	9·45	2·31	5·09	3·33	7·77	8·98	6·45	66·65
,,	3	Ballycastle (Sheskburn)	6·92	3·93	2·61	1·23	·63	5·01	1·84	4·47	3·94	5·53	5·73	4·02	45·86
,,	5	Ballymena (Harryville)	7·41	3·99	4·22	2·31	1·38	5·57	3·20	5·57	3·21	5·89	5·68	4·18	52·61
Co. Londonderry	1	Londonderry (Dunruadh)	8·26	4·52	2·91	1·81	1·05	5·06	2·80	6·68	4·84	5·63	5·29	3·94	52·79
,,	5	Glenedra Lodge	10·46	6·77	5·10	2·89	1·54	6·23	2·73	10·37	5·44	9·83	8·09	7·03	76·48
,,	5	Limavady (Drenagh)	5·92	3·29	2·96	1·17	·93	4·47	1·82	5·65	3·45	5·12	4·16	2·80	41·74
Co. Tyrone	2	Donaghmore	7·51	5·65	3·95	1·85	1·38	6·21	1·83	5·62	2·93	6·51	5·61	3·57	52·62
,,	3	Omagh (Edenfel)	7·66	5·56	3·62	2·27	1·54	5·78	2·50	6·34	5·13	5·29	5·38	3·48	54·55
,,	3	Sion Mills (Sion House)	8·31	4·25	4·27	1·80	1·26	5·72	1·44	5·76	4·50	6·18	5·18	4·39	53·06
Co. Donegal	1	Malin Head	7·47	4·61	2·32	1·32	1·20	4·47	2·47	4·75	3·97	6·26	4·89	3·43	47·16
,,	3	Milford (The Manse)	8·25	4·47	2·75	2·17	1·12	4·90	2·64	6·69	4·21	6·23	5·42	4·22	53·07
,,	3	Dunfanaghy (St. Patrick's)	8·64	4·35	2·57	2·25	·92	3·66	2·67	6·49	4·62	5·78	5·53	4·64	52·12
,,	5	Killybegs (Rockmount)	13·12	6·93	3·43	1·39	2·26	4·92	3·31	6·91	5·23	9·21	7·09	7·20	71·00

Table XXI.—*Monthly Rainfall in* 1928; *the Average,* 1881–1915, *being taken as* 100.

County and River Division.	Station.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
		%	%	%	%	%	%	%	%	%	%	%	%	%
London 2	St. Pancras (Camden Square) ..	194	99	76	86	103	128	89	118	38	130	91	111	106
Kent 1	Tenterden (Ashenden)	163	68	87	168	197	123	53	66	28	186	125	80	112
„ 2	St. Peter's	179	77	131	177	227	131	47	59	77	134	189	159	132
„ 4	Edenbridge (Falconhurst)	153	84	88	116	100	127	84	164	30	174	92	121	114
Sussex 1	Compton (Compton House)	227	99	102	119	79	127	69	81	45	207	120	100	120
„ 3	Brighton W.W. (Lewes Road) ..	237	79	129	179	81	183	106	84	32	202	122	120	133
Hampshire 1	Ventnor (Royal National Hosp.)	206	97	120	139	119	130	149	152	42	228	120	107	138
„ 3	Fordingbridge (Oaklands)	212	114	124	99	71	137	83	92	100	171	94	63	115
„ 8	Sherborne St. John	203	103	102	97	100	104	67	111	85	149	100	85	110
Hertfordshire 3	Royston (Therfield Rectory) ...	160	80	87	64	106	99	102	117	44	113	77	116	99
Buckinghamshire . 3	Slough (Upton)	188	87	102	85	105	115	101	92	71	170	93	88	110
Oxfordshire 3	Oxford (Magdalen College)	201	106	108	64	36	77	81	60	42	115	118	94	92
Northamptonshire. 4	Pitsford (Sedgebrook).....	204	114	93	129	55	130	105	74	38	153	147	96	112
Cambridgeshire ... 2	March	218	93	99	86	117	141	110	63	52	129	106	103	109
Essex..... 4	Chelmsford (County Laboratory)	213	84	124	63	128	122	82	125	44	136	95	131	113
Suffolk 1	Hawkedon Rectory.....	202	87	104	96	105	110	108	71	42	120	88	130	105
„ 3	Rendlesham Hall.....	180	64	151	92	142	83	115	83	41	60	111	161	107
„ 4	Lowestoft (Belle Vue Park)....	176	74	82	86	109	91	88	85	46	61	118	121	94
Norfolk 2	Worstead (Dilham).....	173	97	64	106	101	132	70	69	41	98	106	131	98
„ 4	Little Dunham (Dunham Cot.)..	242	88	98	94	122	151	83	84	24	111	106	119	108
Wiltshire 1	Calne (High Street).....	232	119	115	89	62	111	128	71	73	160	139	100	118
Dorsetshire 3	Weymouth (Westham House) ..	202	128	131	113	83	113	111	120	97	157	96	106	124
South Devonshire . 2	Launceston (Polapit Tamar) ...	196	118	158	94	63	83	80	110	75	135	126	99	117
„ . 4	Ashburton (Druid House)	199	105	142	112	41	114	64	79	67	182	161	86	121
„ . 6	Cullompton	197	125	137	56	87	125	77	56	53	115	127	88	106
North Devonshire . 2	Barnstaple (N. Dev. Athenæum)	198	124	140	77	41	137	85	89	52	163	104	129	117
Cornwall 2	Penzance (Morrab Gardens)	218	130	175	106	52	100	61	69	59	147	87	96	112
„ 2	St. Austell (Trevarna).....	190	126	212	77	70	87	56	88	78	138	96	101	114
Somersetshire 1	Chewton Mendip (The Priory) ..	258	139	128	63	43	92	97	120	56	166	107	79	116
Gloucestershire ... 7	Cirencester (Gwynfa)	208	134	130	77	54	140	104	68	38	151	135	92	113
Shropshire 3	Church Stretton (Wolstaston) ..	239	156	141	89	55	148	54	107	73	143	165	68	120
Staffordshire 2	Market Drayton (Old Springs) ..	233	131	73	57	54	187	56	102	55	123	153	90	111

Table XXI.—*Monthly Rainfall in* 1928*; the Average,* 1881-1915, *being taken as* 100—(*con.*).

County and River Division.	Station.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
		%	%	%	%	%	%	%	%	%	%	%	%	%
Worcestershire ... 1	Malvern (Free Library)	200	123	157	67	52	109	67	66	35	173	96	87	104
Warwickshire 3	Farnborough	213	122	117	84	33	104	94	61	45	137	157	103	107
,, ... 4	Birmingham (Edgbaston)	238	134	119	85	22	129	54	66	36	169	155	72	107
Leicestershire 4	Belvoir Castle Gardens	213	95	66	38	85	180	47	74	25	133	106	65	93
Lincolnshire 3	Boston (Black Sluice, Skirbeck).	215	92	124	85	97	174	56	70	14	144	136	115	110
,, ... 3	Lincoln (Skellingthorpe Hall)..	214	95	112	56	79	83	44	133	19	122	121	76	97
Derbyshire 5	Derby (L.M. & S. Rly.)	258	156	99	73	46	123	56	118	50	150	153	74	114
S. Lancashire 3	Manchester (Whitworth Park) ..	306	179	78	44	57	202	54	142	42	119	170	55	120
C. ,, ... 1	Stonyhurst College	286	187	70	49	32	243	88	160	43	136	157	65	130
C. ,, ... 3	Southport (Hesketh Park)	280	158	91	75	69	224	94	90	48	157	182	91	130
N. ,, ... 2	Ulverston (Poaka Beck).....	294	148	131	92	36	164	118	117	89	137	167	85	133
Yorkshire, W.R. . 7	Rotherham (Moorgate Grange)..	210	138	116	51	63	134	19	90	11	134	128	67	98
,, ,, . 9	Bradford (Lister Park)	282	189	141	52	91	257	28	145	23	145	209	60	138
,, ,, .10	York (Cherry Hill)	279	75	112	57	73	203	22	139	22	144	143	50	111
,, E.R. .. 3	Hull (Pearson Park)	237	92	163	59	60	113	21	127	16	154	111	76	104
,, N.R. .. 1	Leyburn (Bolton Hall)	211	136	125	36	118	248	26	193	18	155	145	57	125
,, ,, .. 2	Felixkirk (Mount St. John)	202	78	137	54	78	185	22	179	25	126	97	65	106
,, ,, .. 5	Scarborough	195	106	158	114	68	191	42	135	49	101	95	60	107
,, ,, .. 6	Middlesbrough (Albert Park) ..	171	76	135	57	62	272	46	125	32	85	102	61	101
Northumberland .. 3	Newcastle (Town Moor)	110	79	120	57	65	185	60	149	46	89	103	65	96
,, .. 4	Hallington(Fawcett)(Newc.W.W.)	182	102	138	37	66	193	46	141	57	101	125	84	107
,, .. 6	Ilderton (Lilburn Tower Gdns.)	218	92	144	72	61	287	44	158	49	91	113	87	115
Cumberland 1	Carlisle (Scaleby).....	278	162	108	49	51	196	120	159	69	133	145	69	130
,, ... 2	Borrowdale (Seathwaite)	263	128	96	84	17	211	187	127	106	167	196	75	141
Westmorland 1	Appleby (Castle Bank)	257	147	152	53	95	252	110	269	62	148	170	41	148
Monmouthshire .. 3	Abergavenny (Larchfield)	174	108	169	40	21	89	48	78	40	188	118	84	103
Glamorganshire .. 5	Cardiff (Ely Pumping Station) ..	251	176	144	60	20	98	68	94	29	150	119	102	115
,, .. 5	Glyncorrwg Colliery	204	153	118	53	12	172	103	107	48	175	195	101	127
Carmarthenshire .. 2	Carmarthen (The Friary)	246	141	109	60	33	212	93	103	46	150	176	119	130
Pembrokeshire ... 4	Haverfordwest (Grammar School)	171	135	172	55	38	187	103	95	54	179	145	149	130
Radnorshire 1	Birmingham W.W. (Tyrmynydd)	195	122	85	66	33	191	88	122	47	133	176	60	113
Montgomeryshire 3	Llangurig (Dernol)	210	170	76	74	26	169	88	90	45	103	179	60	112

Table XXI.—*Monthly Rainfall in* 1928; *the Average,* 1881–1915, *being taken as* 100—(*con.*).

County and River Division.	Station.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
		%	%	%	%	%	%	%	%	%	%	%	%	%
Montgomeryshire.. 5	Lake Vyrnwy (Bank Cynon Isaf)	256	229	84	79	44	186	78	134	56	158	233	76	142
Flintshire 1	Northop (Soughton Hall)	156	124	73	82	112	173	43	99	90	104	162	90	109
Merionethshire ... 4	Dolgelly (Bryntirion)	190	167	57	81	36	229	160	139	43	143	164	80	126
Carnarvonshire ... 2	Llandudno	165	160	75	47	50	194	45	82	56	105	115	87	99
,, ... 3	Llandwrog (Glynllivon Park) ...	185	110	76	55	35	215	83	118	56	139	151	77	112
Anglesey	Holyhead (Salt Island)	207	147	110	38	65	189	69	93	56	146	146	95	117
Isle of Man	Douglas (Borough Cemetery) ...	237	117	139	68	53	271	101	138	80	193	169	89	139
Wigtownshire 3	Stoneykirk (Ardwell House)	239	127	182	113	57	225	55	94	76	215	164	108	139
Kirkcudbrightshire 3	Dalry (Glendarroch)	241	103	160	75	61	236	65	176	65	211	148	82	139
,, 4	Auchencairn (Torr House)	322	118	130	78	67	256	123	147	96	209	184	89	153
Dumfriesshire 3	Dumfries (Crichton Roy. Inst.)..	288	127	173	60	66	256	104	173	84	205	142	85	148
Roxburghshire.... 3	Hawick (Wolfelee)	288	103	160	46	91	211	55	161	49	158	118	55	126
Peebleshire 2	Stobo Castle.....	348	147	141	59	66	179	81	113	89	152	112	67	131
Berwickshire 4	Marchmont House	206	123	155	72	46	233	52	133	63	101	114	71	112
Haddingtonshire .. 5	North Berwick Reservoir	162	84	95	46	65	262	75	135	108	93	111	83	109
Midlothianshire .. 5	West Calder (Addiewell).....	300	176	69	61	85	172	94	110	132	141	90	102	127
,, .. 5	Edinburgh (Univ. Eng. Lab.) ..	226	182	97	34	64	227	72	120	105	105	114	87	117
Ayrshire 3	Kilmarnock (Agricultural Coll.) .	283	118	73	62	78	193	81	110	131	191	145	87	132
,, ... 8	Girvan (Pinmore)	194	96	155	70	43	152	70	119	82	159	151	102	120
Renfrewshire 3	Shaws W.W. (Loch Thom)	214	105	128	87	54	207	117	98	97	198	152	98	131
Bute 1	Rothesay (Ardencraig)	232	136	150	88	78	202	104	102	118	234	182	126	149
Argyllshire 8	Lochgilphead (Poltalloch)	224	105	152	110	45	142	96	90	90	161	166	100	127
,, ...11	Inveraray Castle Gardens	259	152	76	75	33	180	150	118	114	170	179	102	140
,, ...14	Islay (Eallabus)	222	124	132	91	48	170	120	124	121	221	173	146	147
Kinross-shire 2	Loch Leven Sluice	227	115	105	41	66	227	59	143	148	158	107	92	125
Perthshire..... 1	Loch Dhu	246	135	178	109	46	180	117	130	108	182	135	96	143
,, ... 7	Crieff (Strathearn Hydro)	252	100	200	72	88	169	52	143	128	157	116	104	135
,, ...14	Blair Atholl (Blair Castle Gdns.)	253	127	236	40	56	139	45	162	158	188	143	91	142
Angus (Forfar).... 2	Dundee (Eastern Necropolis) ...	227	97	226	59	65	227	40	153	121	143	134	86	129
,, ... 4	Montrose (Sunnyside Asylum)...	217	67	192	69	63	180	82	132	134	126	102	92	120
Aberdeenshire 1	Balmoral (Castle Gdns.).....	196	77	214	71	94	169	96	165	148	118	85	74	124
,, ... 2	Aberdeen (Kings College).....	174	31	148	137	69	192	74	83	120	94	133	87	109

Table XXI.—*Monthly Rainfall in* 1928; *the Average,* 1881–1915, *being taken as* 100—(*con.*).

County and River Division.	Station.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
		%	%	%	%	%	%	%	%	%	%	%	%	%
Aberdeenshire 4	New Deer Schoolhouse	134	38	98	121	75	162	59	95	137	80	134	117	102
Morayshire 2	Gordon Castle	147	47	72	46	65	175	85	101	142	60	134	79	96
,, ... 3	Grantown-on-Spey	153	72	64	61	109	132	96	142	161	71	118	85	106
Nairnshire 2	Nairn (Delnies)	173	126	84	59	103	165	69	132	135	98	142	82	114
Inverness-shire ... 3	Alvie Manse	230	165	89	60	104	187	79	126	153	153	162	83	134
,, ... 6	Fort Augustus (St. Benedict's) .	224	230	71	53	69	169	120	109	123	172	142	85	136
,, ... 7	Loch Quoich (Glenquoich)	154	169	91	82	25	170	200	101	106	156	142	85	125
,, ...13	Arisaig House	167	101	113	77	37	142	131	72	75	141	127	95	109
,, ...17	Fort William	174	138	88	94	21	131	156	93	99	148	139	77	117
Ross and Cromarty 4	Alness (Ardross Castle)	176	137	119	68	122	146	64	178	93	114	133	105	122
,, 7	Ullapool	191	145	67	68	54	146	132	99	82	81	113	82	106
,, 8	Loch Torridon (Bendamph)	186	121	76	88	53	137	125	68	83	113	126	103	110
,, 10	Stornoway	205	123	85	81	71	142	101	55	77	98	116	88	106
Sutherlandshire .. 1	Lairg	213	166	82	56	55	129	79	90	55	118	118	129	111
,, .. 4	Tongue	193	126	81	69	78	174	70	102	81	82	118	70	103
,, .. 4	Melvich	152	115	67	60	70	220	102	84	101	117	143	158	117
,, .. 5	Loch More (Achfary)	189	142	57	62	83	148	164	95	82	88	153	91	114
Caithness-shire.... 2	Wick	191	74	74	80	71	173	83	73	96	85	146	113	105
Orkney	Pomona (Deerness)	150	113	84	78	76	103	90	47	77	100	109	97	96
Co. Cork 6	Dunmanway (The Rectory)	163	116	139	140	68	216	57	109	90	160	131	96	125
,, ,, ... 7	Glanmire (Lota Lodge) No. 1 ..	135	90	252	209	102	209	48	172	88	185	134	103	142
,, ,, ... 9	Mallow (Longueville)	137	111	193	205	108	170	24	108	78	168	124	96	126
,, Kerry 3	Cahirciveen (Valentia Obsy.) ...	148	90	119	136	76	182	53	181	114	161	134	104	126
,, ,, ... 3	Killarney (District Asylum)	161	93	113	156	43	147	55	104	99	145	118	83	111
,, Waterford 3	Waterford (Brook Lodge)	111	77	207	108	86	236	29	119	54	190	153	88	121
,, Tipperary 1	Nenagh (Castle Lough)	161	180	133	108	60	177	76	101	65	199	156	108	128
,, ,, ... 3	Cahir (Abbey)	153	128	190	120	74	179	38	162	89	148	169	80	128
,, Limerick 2	Foynes (Coolnanes)	158	151	104	155	42	166	78	131	74	173	146	108	126
,, Wexford..... 4	Gorey (Courtown House)	161	105	371	111	52	229	44	186	30	164	194	108	146
,, Kilkenny 2	Kilkenny Castle.....	131	122	191	97	68	160	26	136	66	166	133	100	118
,, Carlow 2	Bagnalstown (Fenagh Ho.)	140	124	226	102	43	226	38	198	53	158	118	85	126
†,, Leix 2	Abbey Leix (Blandsfort)	132	133	184	78	52	154	49	107	68	142	129	95	111

† Formerly called Queen's County.

Table XXI.—*Monthly Rainfall, in* 1928; *the Average,* 1881-1915, *being taken as* 100—(*con.*).

County and River Division.	Station.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
		%	%	%	%	%	%	%	%	%	%	%	%	%
§Co Offaly 1	Birr Castle	137	170	135	86	97	188	72	108	68	187	126	107	123
,, Kildare 2	Straffan House	152	172	147	67	49	202	54	99	79	134	119	108	115
,, Dublin 3	Balbriggan (Ardgillan) No. 1 ...	154	148	208	70	54	220	48	95	59	138	143	131	121
,, Meath 4	Kells (Headfort)	148	153	144	68	51	208	63	138	105	166	161	96	126
,, Westmeath .. 1	Mullingar (Belvedere)	155	135	113	59	78	237	64	126	85	158	155	103	123
,, Louth 3	Greenore	217	215	117	60	51	150	65	88	102	159	148	94	121
,, Longford 2	Castle Forbes Gardens	180	115	115	64	67	265	67	127	103	156	154	69	123
,, Galway 3	Ballynahinch Castle	168	91	88	119	47	245	92	155	141	188	159	100	133
,, ,, ... 5	Ahascragh (Clonbrock)	165	139	89	100	56	233	53	116	84	171	157	76	120
,, Mayo 3	Blacksod Point	137	77	61	72	35	172	93	130	180	195	113	113	119
,, ,, ... 4	Westport House	163	77	89	102	32	205	70	129	123	176	127	90	117
,, Sligo 2	Collooney (Markree Observatory)	190	112	103	67	47	229	56	140	114	184	136	103	126
,, Cavan 1	Belturbet (Cloverhill)	165	120	116	92	67	188	71	136	87	142	147	58	115
,, Armagh 5	Armagh Observatory	192	182	135	85	34	166	55	189	86	173	150	78	129
,, Down 2	Seaforde	202	163	225	86	47	159	79	114	88	165	169	108	135
,, Antrim 1	Belfast (Queen's University) ...	218	190	150	73	59	161	91	82	94	173	163	107	131
,, ,, ... 5	Ballymena (Harryville)	200	123	134	87	48	191	93	130	103	160	140	94	127
,, Londonderry . 5	Londonderry (Creggan Reservoir)	214	148	107	67	43	216	90	136	160	163	149	86	133
,, ,, . 5	Limavady (Drenagh)	184	115	101	52	40	172	58	148	118	149	112	74	113
,, Tyrone 3	Omagh (Edenfel)	216	187	115	86	59	205	74	149	168	144	142	82	136
,, Donegal 3	Milford (The Manse)	220	138	81	85	45	178	80	159	130	156	125	90	126
,, ,, ... 5	Killybegs (Rockmount)	234	139	67	39	63	129	75	123	114	164	113	99	117
England .....(general mean*, 57 stations) ..		**216**	**113**	**119**	**83**	**79**	**150**	**76**	**108**	**49**	**140**	**126**	**91**	..‡
Wales .....(,, ,, 13 ,,) ..		**201**	**149**	**104**	**61**	**40**	**177**	**82**	**104**	**51**	**144**	**160**	**91**	..
England and Wales ..(,, ,, 70 ,,) ..		**213**	**119**	**116**	**79**	**72**	**155**	**77**	**107**	**49**	**141**	**133**	**91**	..
Scotland .....(,, ,, 44 ,,) ..		**215**	**119**	**120**	**72**	**67**	**180**	**93**	**116**	**106**	**140**	**134**	**94**	..
Ireland .....(,, ,, 35 ,,) ..		**169**	**132**	**145**	**97**	**58**	**193**	**62**	**132**	**96**	**165**	**141**	**95**	..
British Isles† .....(,, ,, 150 ,,) ..		**203**	**122**	**124**	**81**	**67**	**172**	**78**	**116**	**77**	**146**	**135**	**93**	..

*The "general" values given in the last six rows are obtained by taking the means of the percentage values for the stations. † Including **Isle of** Man. ‡ See Table XXIII.
§Formerly called King's County.

9. SEASONAL RAINFALL, 1927-1928.

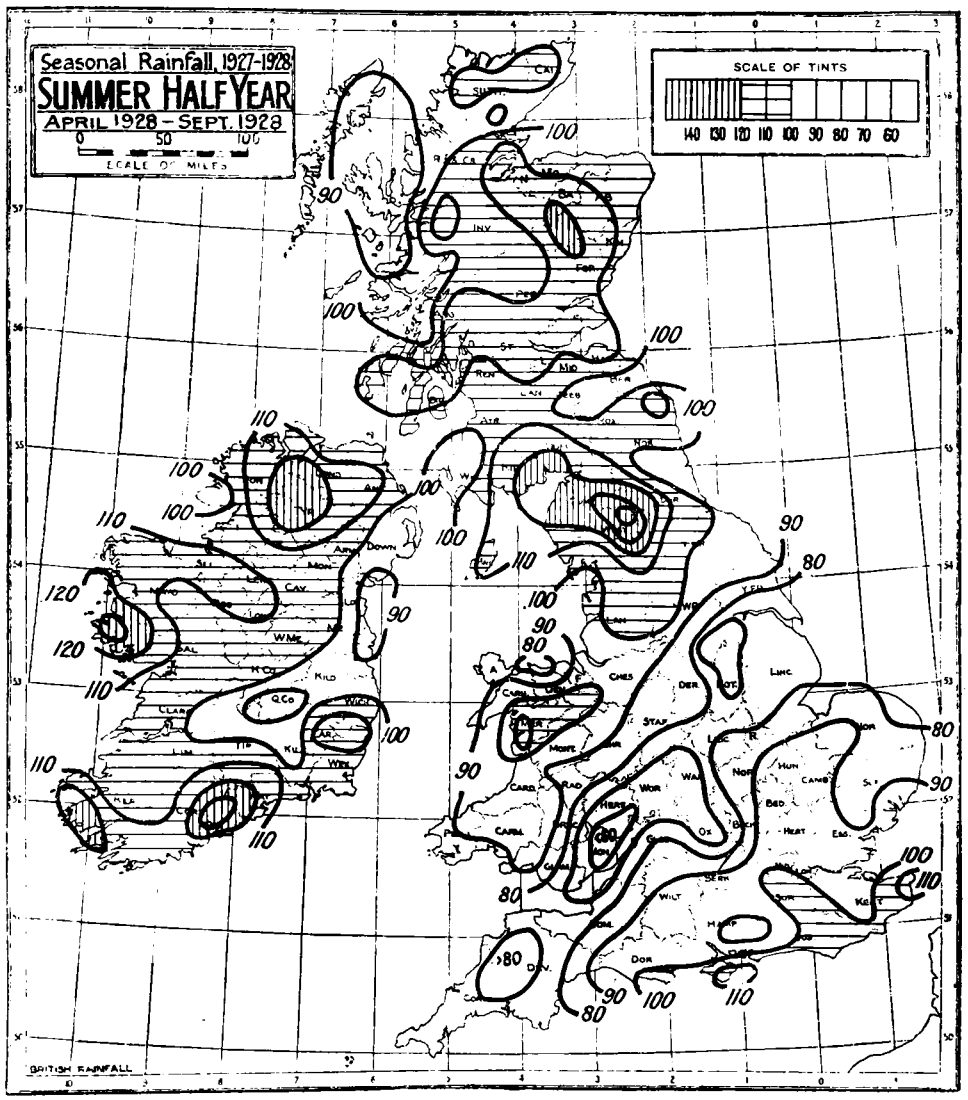
There are definite advantages in considering the rainfall of the winter and summer separately. One defect of the calendar year as a

Rainfall, Winter Half-year, as per cent. of average.

unit of time for rainfall purposes is that half of a winter is included in one calendar year and the other half in another year. Winter

rainfall has a special economic importance, for, except in the wettest areas, the summer rainfall is, for the most part, lost by evaporation or absorbed by vegetation.

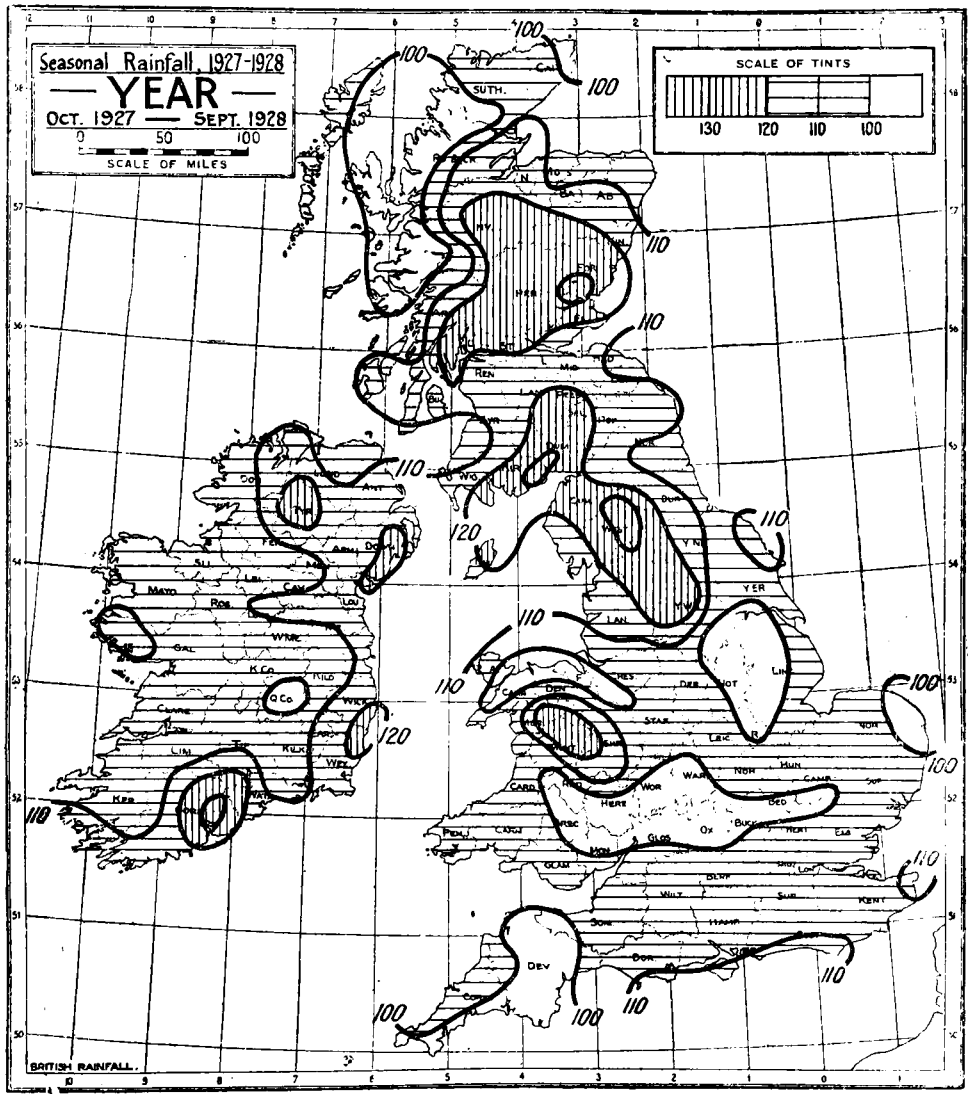
In this section the rainfall of the winter season, 1st October, 1927, to 31st March, 1928, and of the summer season, 1st April, 1928, to 30th September, 1928, is dealt with, as well as the rainfall of the whole


Seasonal Rainfall, 1927-1928
SUMMER HALF YEAR
APRIL 1928 – SEPT. 1928
0 50 100
SCALE OF TINTS
140 130 120 110 100 90 80 70 60
BRITISH RAINFALL

Rainfall, Summer Half-year, as per cent. of average.

seasonal year, 1st October, 1927, to 30th September, 1928. It is natural to associate a summer season with the preceding rather than with the following winter season, since the water required in summer for replenishing streams and for the needs of animal and vegetable life is derived, in

part, from that which has been naturally stored during the previous winter season. One section of *British Rainfall* has been devoted to this subject since the volume for 1908, and three maps and Table XXII, similar to those introduced in that volume, are now reproduced.



Rainfall, Seasonal Year, as per cent. of average.

Table XXII contains rainfall values for each of these two seasons for the stations shown in Section 8 on Monthly Rainfall. The values are expressed as percentages of the average fall for the season and the station. The table gives in the fourth column the corresponding percentages for each station for the whole of the seasonal year. These last figures are not always the mean of the percentages for the two seasons, but often show a bias towards the winter value rather than

that of the summer. This is due to the fact that the average rainfall for the winter is, in general, greater than that for the summer.

The *winter* half-year contained the wettest January on record; November, 1927, and February and March, 1928, had moderate excesses, while October and December, 1927, had moderate deficiences. The rainfall of the whole period was 118 per cent. of the average. The map shows that there was less than the average in parts of Central and North Wales, the west of Scotland, including the Inner Hebrides, and also in Connemara. The smallest percentage values were 95 at Glynllivon Park near Carnarvon, and at Westport House, Co. Mayo. The range in the percentage values was similar over the three main divisions, England and Wales, Scotland and Ireland. The largest values in each country were 160 at Greenore, Co. Louth; 155 at Dundee, and 148 at Bradford. The largest values occurred in two parallel belts, *viz.*, from the south-east of Ireland to the Firth of Tay and from the south-east of Wales to the mouth of the Tees.

The *summer* included four months with less than the average amount over the British Isles; April, May, July and September. The deficiency was large in September in England and Wales. On the other hand June was very wet generally, and August was a fairly wet month in Scotland and Ireland. For the whole period the deficiency over the British Isles was only 1 per cent., but in England and Wales it amounted to 10 per cent. There was an excess in both Scotland and Ireland. There was less than 80 per cent. during the summer over a broad belt across England from Lands End to the mouth of the Humber as well as at Llandudno. At Abergavenny in Monmouthshire the total was only 53 per cent. There was rather more than the average amount along the south coast of England and large excesses in the north-west culminating at Appleby, with 148 per cent. or an excess of 7·42 inches. In Scotland there was less than the average in the north-west and more than 110 per cent. in parts of south and central districts. At Balmoral the total of 17·59 inches was 3·44 inches or 24 per cent. in excess of the average. In Ireland there were four well-marked areas with more than 120 per cent., *viz*, near Cork, Valentia, in Connemara and Co. Tyrone. The total at Glanmire, near Cork, was 24·11 inches and it was 6·81 inches, or 39 per cent. in excess of the average.

The map for the *seasonal year* necessarily shows characteristics similar to those of the seasonal maps. The belts of heavy winter rains on either side of the Irish Sea are reproduced on the map for the seasonal year, where locally there was more than 120 per cent. and even 130 per cent. at Cork, Dumfries, Dundee and Appleby. The belt of deficient summer rains is indicated on the map of the year by large areas with less than the average in Devonshire, from Plinlimon to Cambridge and in Nottinghamshire. The percentage values range from 90 at Abergavenny in Monmouthshire to 137 at Appleby. At

Seathwaite the excess for the year was 23 per cent. or 29 inches, of which the winter contributed 18 and the summer 11 inches.

In *British Rainfall*, 1927, p. 125, a table was reproduced of the serial general values of Seasonal Rainfall for the British Isles from 1881 to 1927. A comparison of the general values for 1928 indicates that the winter 1927–28, with 118 per cent., was the wettest since that of 1915–16, with 119 per cent., and was only exceeded three other times since 1881, *viz.*, in 1914–1915, 1911–1912 and 1882–1883, when the general values were 124, 131 and 125 per cent. respectively. In each of the six summers since the famous dry year 1921 the rainfall has exceeded the average, so that the summer of 1928 stands out in comparison as unusually dry although the deficiency was only 1 per cent. It will be recalled that since about 1907 wet years have predominated. Initially the excesses were contributed more especially by wet winters, of more recent years the summers were particularly wet, while 1928 reverted to the earlier type. Although the rainfall of the seasonal year was 109 per cent. it was less than that of the recent years 1926–1927, 1924–25, and 1923–1924.

In *British Rainfall*, 1926, p. 125, values are given for England and Wales, Scotland and Ireland separately from 1906–1907 to date. The winter of 1927–28 was the wettest in the series in Scotland, and the wettest for 11 years in both England and Wales and in Ireland. The rainfall of the summer in both Scotland and Ireland, although appreciably in excess of the average, was not very remarkable. In England and Wales the summer was the driest since that of 1921, and in the 22 years of comparable data there were only five drier summers. The seasonal year in Scotland, apart from that of 1926–1927, was the wettest in the series.

Table XXII.—*Seasonal Rainfall, 1927–28, in relation to the Average, 1881–1915.*

Station.‡	Winter 6 Months, Oct. 1927–Mar. 1928. Per cent. of Average.	Summer 6 Months, Apl. 1928–Sept. 1928. Per cent. of Average.	Twelve Months Oct. 1927–Sept. 1928. Per cent. of Average.	Station.‡	Winter 6 Months, Oct. 1927–Mar. 1928. Per cent. of Average.	Summer 6 Months, Apl. 1928–Sept. 1928. Per cent. of Average.	Twelve Months, Oct. 1927–Sept. 1928. Per cent. of Average.
St. Pancras (Camden Square) ..	115	95	106	St. Austell (Trevarna)	116	76	100
Tenterden (Ashenden)	102	98	100	Chewton Mendip (The Priory) ..	125	83	107
St. Peter's.....	114	112	113	Cirencester (Gwynfa)	115	81	100
Edenbridge (Falconhurst)	103	105	104	Church Stretton (Wolstaston) ..	133	89	113
Compton (Compton House)	121	85	105	Market Drayton (Old Springs) ..	111	88	100
Brighton W.W. (Lewes Road) ..	122	107	115	Malvern (Free Library)	127	67	98
Ventnor (Royal National Hosp.).	111	118	114	Farnborough	112	71	92
Fordingbridge (Oaklands)	116	96	108	Birmingham (Edgbaston)	132	66	100
Sherborne St. John	113	94	105	Belvoir Castle Gardens	112	75	94
Royston (Therfield Rectory)	102	92	97	Boston (Black Sluice, Skirbeck)	132	81	107
Slough (Upton)	111	95	104	Lincoln (Skellingthorpe Hall)..	114	74	94
Oxford (Magdalen College)	121	61	92	Derby (L.M.&S. Rly.)	133	81	107
Pitsford (Sedgebrook).....	117	88	103	Manchester (Whitworth Park) ..	123	95	109
March	117	95	106	Stonyhurst College	128	107	118
Chelmsford (County Laboratory)	115	96	106	Southport (Hesketh Park)	125	97	112
Hawkedon Rectory.....	113	88	101	Ulverston (Poaka Beck).....	128	104	118
Rendlesham Hall.....	117	92	105	Rotherham (Moorgate Grange)..	116	64	91
Lowestoft (Belle Vue Park).....	115	83	99	Bradford (Lister Park)	148	101	127
Worstead (Dilham)	119	73	97	York (Cherry Hill)	121	90	105
Little Dunham (Dunham Cot.)..	121	91	106	Hull (Pearson Park)	124	71	98
Calne (High Street).....	115	90	103	Leyburn (Bolton Hall)	129	109	120
Weymouth (We tham House)...	116	107	112	Felixkirk (Mount St. John)	118	96	107
Launceston (Polapit Tamar) ...	115	86	104	Scarborough	127	99	114
Ashburton (Druid House)	108	79	98	Middlesbrough (Albert Park) ..	117	101	109
Cullompton	113	74	97	Newcastle (Town Moor)	108	97	103
Barnstaple (N. Dev. Athenæum)	103	80	94	Hallington (Fawcett)	121	93	107
Penzance (Morrab Gardens)	116	73	100	Ilderton (Lilburn Tower Gdns.) .	121	111	116

‡ For Counties see Table XXI, pp. 111-115.

Table XXII.—*Seasonal Rainfall*, 1927-28, *in relation to the Average*, 1881-1915—(*con.*).

Station.‡	Winter 6 Months, Oct. 1927-Mar. 1928. Per cent. of Average.	Summer 6 Months, Apl. 1928-Sept. 1928. Per cent. of Average.	Twelve Months, Oct. 1927-Sept. 1928. Per cent. of Average.	Station.‡	Winter 6 Months, Oct. 1927-Mar. 1928. Per cent. of Average.	Summer 6 Months, Apl. 1928-Sept. 1928. Per cent. of Average.	Twelve Months, Oct. 1927-Sept. 1928. Per cent. of Average.
Carlisle (Scaleby)	121	115	118	Kilmarnock (Agricultural Coll.)	122	109	116
Borrowdale (Seathwaite)	123	122	123	Girvan (Pinmore)	110	90	102
Appleby (Castle Bank)	128	148	137	Shaws W.W. (Loch Thom)	125	108	118
Abergavenny (Larchfield)	115	53	90	Rothesay (Ardencraig)	128	114	122
Cardiff (Ely Pumping Station)	134	64	104	Lochgilphead (Poltalloch)	115	95	107
Glyncorrwg Colliery	115	84	103	Inveraray Castle Gardens	126	113	121
Carmarthen (The Friary)	120	91	108	Islay (Eallabus)	117	114	116
Haverfordwest (Grammar Sch.)	119	88	106	Loch Leven Sluice	124	116	120
Birmingham W.W. (Tyrmyndd)	96	92	94	Loch Dhu	134	115	127
Llangurig (Dernol)	108	82	98	Crieff (Strathearn Hydro)	133	112	124
Lake Vyrnwy (Bank Cynon Isaf)	143	99	126	Blair Atholl (Blair Castle Gdns.)	140	105	125
Northop (Soughton Hall)	98	99	99	Dundee (Eastern Necropolis)	155	111	133
Dolgelly (Bryntirion)	105	116	110	Montrose (Sunnyside Asylum)	139	109	124
Llandudno	109	79	96	Balmoral Castle Gardens	125	124	125
Llandwrog (Glynllivon Park)	95	94	95	Aberdeen (King's College)	113	106	110
Holyhead (Salt Island)	118	85	104	New Deer Schoolhouse	114	104	109
Douglas (Borough Cemetery)	123	117	121	Gordon Castle	100	103	101
Stoneykirk (Ardwell House)	134	100	119	Grantown-on-Spey	104	119	111
Dalry (Glendarroch)	120	114	118	Nairn (Delnies)	118	110	114
Auchencairn (Torr House)	134	128	131	Alvie Manse	129	119	125
Dumfries (Crichton Roy. Inst.)	135	127	131	Fort Augustus (St. Benedict's)	131	107	122
Hawick (Wolfelee)	131	103	119	Loch Quoich (Glenquoich)	108	113	110
Stobo Castle	146	99	125	Arisaig House	96	88	93
Marchmont House	121	99	110	Fort William	100	100	100
North Berwick Reservoir	108	114	111	Alness (Ardross Castle)	120	111	116
West Calder (Addiewell)	125	110	118	Ullapool	101	96	99
Edinburgh (Univ. Engin. Lab.)	118	105	112	Loch Torridon (Bendamph)	99	90	96

‡ For Counties see Table XXI, pp. 111-115.

Table XXII.—*Seasonal Rainfall, 1927–28, in relation to the Average, 1881–1915—(con.).*

Station.‡	Winter 6 Months, Oct. 1927–Mar. 1928. Per cent. of Average.	Summer 6 Months, Apl. 1928–Sept. 1928. Per cent. of Average.	Twelve Months, Oct. 1927–Sept. 1928. Per cent. of Average.
Stornoway	108	84	99
Lairg	116	76	98
Tongue	109	92	102
Melvich	104	102	104
Loch More (Achfary)	102	104	103
Wick	103	93	98
Pomona (Deerness)	108	77	96
Dunmanway (The Rectory)	121	112	117
Glanmire (Lota Lodge) No. 1	130	139	133
Mallow (Longueville)	122	114	119
Cahirciveen (Valentia Obsy.)	102	126	112
Killarney (District Asylum)	102	100	102
Waterford (Brook Lodge)	113	104	109
Nenagh (Castle Lough)	116	96	107
Cahir (Abbey)	123	111	118
Foynes (Coolnanes)	100	108	104
Gorey (Courtown House)	143	112	129
Kilkenny Castle	118	94	107
Bagnalstown (Fenagh Ho.)	120	113	117
Abbey Leix (Blandsfort)	110	86	98
Birr Castle	104	102	104
Straffan House	120	92	107
Balbriggan (Ardgillan) No. 1	138	89	114
Kells (Headfort)	114	107	110
Mullingar (Belvedere)	103	109	106
Greenore	160	86	124
Castle Forbes Gardens	106	116	111
Ballynahinch Castle	102	134	115
Ahascragh (Clonbrock)	100	106	103
Blacksod Point	96	118	105
Westport House	95	110	102
Collooney (Markree Observatory)	97	111	103
Belturbet (Cloverhill)	103	108	105
Armagh Observatory	124	108	116
Seaforde	145	97	123
Belfast (Queen's University)	144	93	119
Ballymena (Harryville)	116	111	114
Londonderry (Creggan Reservoir)	116	121	119
Limavady (Drenagh)	105	103	104
Omagh (Edenfel)	120	126	123
Milford (The Manse)	106	117	111
Killybegs (Rockmount)	106	94	101
General Values.* **England**	**119**	**91**	**106**
Wales	**113**	**87**	**103**
England and Wales	**118**	**90**	**105**
Scotland	**119**	**105**	**113**
Ireland	**115**	**108**	**112**
British Isles†	**118**	**99**	**109**

* Obtained by taking the means of the percentage values for the stations. † Including Isle of Man. ‡ For Counties see Table XXI, pp. 111-115.

10. THE TOTAL FALL OF RAIN IN 1928 AND ITS RELATION TO THE AVERAGE.

The total rainfall for the year is given for over 5,000 stations in the British Isles in the General Table, Part III of this volume. As many of these totals as practicable have been plotted on a map on the scale of 19 miles to the inch. In the districts of relatively few rainfall stations, each record has been plotted, while in the more thickly represented areas some have had to be omitted. Isohyetal lines, or lines of equal rainfall amount, have been drawn, giving a cartographical presentation of the distribution of the rainfall of the year over the land. The map is reproduced on a smaller scale as the folding plate opposite this page. Such a map is dominated by the orography of the country to such an extent that not only is it complicated in itself, but it also closely resembles its predecessors, the differences being noticeable only after detailed examination and comparison. The characteristics of a particular year are brought out better by a map such as that opposite p. 126, in which the percentage ratio of the rainfall for the year to the average is shown. It has been coloured so that blue areas represent regions where the fall in 1928 was more than the average, and red areas represent regions where the fall in 1928 was less than the average. The statistics on which the latter map is based are set out in Tables XXI and XXIV.

The percentage map for 1928 shows by means of continuous lines the places where the values of the rainfall were, respectively, 100, 110, 120, 130, 140, 150 and 160 per cent. of the average values. The areas with an excess were unusually widespread. The deficiencies nowhere exceeded 10 per cent. and were confined mainly to stations along the east coast of Great Britain. There was less than the average rainfall along a coastal strip from Flamborough Head to Lowestoft, stretching as far inland as Rotherham and Luton, from Stockton-on-Tees to Morpeth, in Banffshire, in the neighbourhood of Oxford, Hereford and Evesham, as well as at Sidmouth and Llandudno. Only about one-twentieth of the total area of the British Isles recorded less than the average. The rainfall in Ireland was everywhere in excess of 110 per cent. There were four well-marked areas with more than 130 per cent. in the northern half of Ireland and two in the south. In both Co. Cork and Co. Wexford, the total exceeded 140 per cent. of the average. In Great Britain the largest excesses were confined more especially to the western half. Falls of more than 140 per cent. occurred in North Wales, in the English Lake District, the Southern Uplands of Scotland, in the Isle of Islay and over a large area stretching from Paisley and Rothesay to the Grampians. There were small areas with over 150 per cent. on either side of the Solway Firth, while at Eskdalemuir Observatory, to the north of Langholm, the total was 164 per cent. of the average.

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[face page 124]

The most remarkable feature of the rainfall of 1928 was the large area with an excess in Ireland and in the western half of the British Isles, particularly in the English Lake District and the Southern Uplands of Scotland, where locally 1928 was the wettest year in the last 60 years of comparable data. The last occasion on which the 160 per cent. line was drawn on the annual map was that for 1877, when more than this amount fell in part of the Southern Uplands of Scotland and near Montrose, Forfarshire.

Use is made of the percentage values at the 271 stations of both Tables XXI and XXIV to derive general values of the total rainfall for the year over the British Isles and over the larger divisions separately. These values are set out in the following table.

TABLE XXIII.—*General Rainfall, 1928, compared with average.*

Countries.	No. of Stations.	Average 35 years 1881-1915.	1928	
			Per cent.	Rainfall.
		in.		in.
England	135	32·67	113	37·0
Wales	25	50·14	119	59·6
England and Wales	160	35·23	115	40·4
Scotland	62	50·32	123	62·0
Ireland	48	43·30	126	54·4
British Isles†	271	41·41	118	49·0

† Including Isle of Man.

For the British Isles, as a whole, 1928 with 118 per cent. was as wet as 1927, and the sixth successive year with a rainfall in excess of the average. The year 1928 was much wetter than 1927 in Scotland and Ireland but drier in England and Wales. Both 1927 and 1928 were slightly wetter than 1924 over the country generally and wetter than any year since 1903, when the rainfall was 127 per cent. of the average. Since comparable statistics became available, in 1868, there have been only four wetter years, 1872, 1877, 1882 and 1903, when the general percentage values were 137, 127, 120 and 127, respectively. The rainfall over England and Wales was considerably exceeded in 1924 and 1927. Over Scotland and Ireland the rainfall was much more remarkable. During the last 60 years the rainfall of 1928 over Ireland has been exceeded only once, in 1872, with 128 per cent., while in Scotland only the three years 1872, 1877 and 1903 were wetter with 134, 131 and 129 per cent.

The general distribution of the actual rainfall, as shown on the folding plate, is similar to that for other years. The total for the year was less than 25 inches in the neighbourhood of the Thames Estuary, in East Anglia, the neighbourhood of the Wash and the estuary of the

Humber as well as along part of the Moray Firth. In parts of Cambridgeshire and at Spurn Head the total was 20 inches. In Ireland the rainfall appears to have been nowhere less than 27 inches. More than 200 inches were recorded in the English Lake District and Snowdonia.

Among the largest totals reported for the year and set out in the General Table, Part III, the following may be mentioned :—

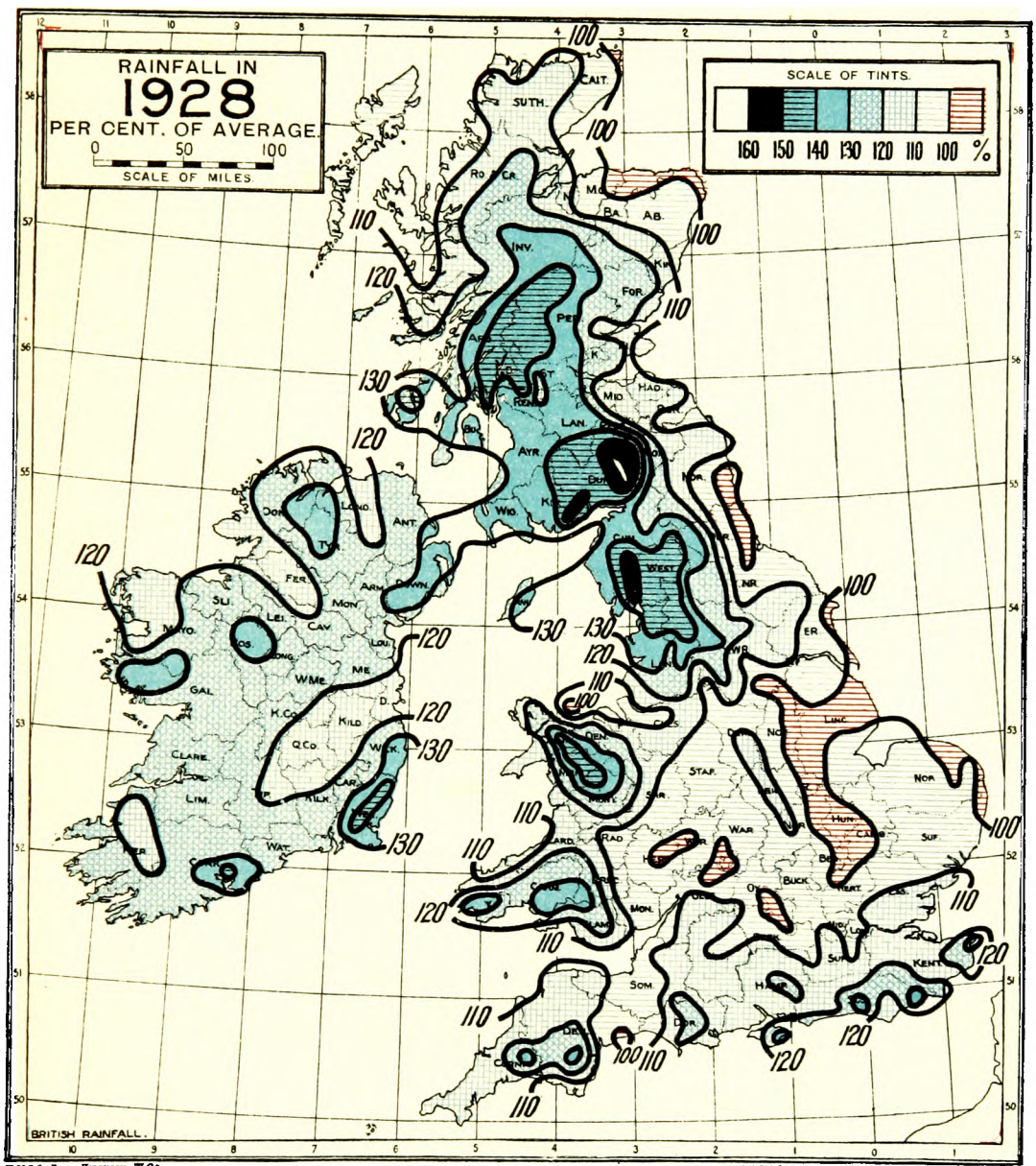
	Inches.
England :—Cumberland, Borrowdale (Seathwaite)	182·15
Wales :—Carnarvon, Snowdon (Crib Goch) ..	211·10
,, ,, (Delta) ..	208·00
Scotland :—Argyll, Mull (Benmore) ..	160·80
Invernessshire, Loch Quoich (Loan) ..	141·80
Ireland :—Kerry, Kilgarvan (Inchimore) ..	148·65
Mayo, Aasleagh House ..	124·14

The historic records from the English Lake District at Seathwaite and The Stye require special mention. The record at Seathwaite commenced in 1845, and the largest annual totals prior to 1928 (with 182·15 inches), were 182·05 in 1872 and 182·58 inches in 1861. A new gauge, set up in 1881, and subsequently regarded as the standard, recorded 2 per cent. less than the old gauge. In order, therefore, to secure a homogeneous series, it is necessary to reduce the earlier values, including those of 1872 and 1861 by this amount. It seems reasonable to conclude, therefore, that 1928 was one of the wettest years at Seathwaite and, probably, the wettest in 84 years. The record at The Stye is not complete for the year, as it was impossible to secure a reading on 1st January, 1928, owing to the water in the gauge being frozen. The estimated value at The Stye for January is 50 inches, and this gives a total for the year of 250 inches, which just exceeds the measurement made in 1923 of 247·3 inches, which was previously the highest on record. In 1872 the total recorded at The Stye was 244·0 inches.

Some of the smallest totals for the year are set out below :—

	Inches.
England :—Cambridge, Cambridge W.W. (Cherryhinton) ..	19·28
Yorks, E.R., Spurn Head ..	19·88
Scotland :—Moray, Duffus (Hopeman Lodge) ..	25·69

RELATION OF RAINFALL IN 1928 TO THE AVERAGE OF 1881–1915.



H.M.S.O. Press, Kingsway, W.C.2. Ps.10484/1903 Wt.1519 D 6027/80 750. 6/28.

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The area coloured Red had rainfall below the average, that coloured Blue had rainfall above the average.

Table XXIV.—*Rainfall of* 1928 *as Percentage of Average,* 1885-1915.*

County.	Station.	Per cent. of Average.	County.	Station.	Per cent. of Average.
	ENGLAND.		YorksW.R.	Wakefield (Clarence Park) ...	107
Surrey ...	Reigate (The Knowle)	107	,,	Malham Tarn	123
Kent	Folkestone (Cherry Gardens) .	122	,, E.R.	Patrington	99
,, ...	Rochester (Knights Place)....	116	,,	Lowthorpe (The Elms)	94
Sussex ...	Yapton (Bonhams)	111	,, N.R.	Malton (Broughton Rise)	114
,, ...	Horsham (Wimblehurst) ...	114	,,	Guisborough (Lockwood Res.)	107
,, ...	St. Leonards (Gensing Gardens)	134	Durham ..	Barnard Castle (County Schl.)	133
Hampshire	Totland Bay (Aston House) ..	118	,, ..	Ushaw (St. Cuthbert's College)	103
,,	Portsmouth (Victoria Park) ..	117	North'ld...	Morpeth (Cockle Park)	93
,,	Ovington Rectory	121	,, ..	Howick Hall	111
Berkshire .	Wellington College	86	Cumberl'd.	Penrith (Briar Cottage)	135
,, .	Newbury (Greenham Common)	113	,,	Keswick (Derwent Is.).....	141
Hertford .	Harpenden (Rothamsted)	96	,,	Ravenglass (The Grove).....	138
Oxford ...	Bodicote School	105	Westmorl'd	Kirkby Stephen (Redman Ho.)	143
N'hants...	Wellingborough (Swanspool)..	101	,,	Grasmere (The Wray)	155
,, ..	Oundle (Milton Road)	94		**WALES.**	
Bedford...	Woburn (Crawley Mill)	109	Monmouth	Tredegar	109
Cambridge	Stretham Engine	103	Glamorgan	Gorseinon (Penllergaer)	124
Essex.....	Elsenham (Gaunts End)	105	Carmarth'n	Llanwrda (Dolaucothy)	127
,, ...	Shoeburyness (New Ranges) ..	114	Pembroke	Pembroke (Stackpole Court) .	125
,, ...	Bradwell-on-Sea	120	,,	St. Ann's Head	134
,, ...	Earls Colne (Chalkney Ho.)...	101	,,	Fishguard(Langton,Dwrbach)	107
Suffolk ...	BurySt.Edmunds(Westley Ho.)	103	Radnor...	New Radnor	108
Norfolk...	Norwich(Christ Ch. Rd.,Eaton)	100	Montgom'y	Newtown (Penarth Weir)	124
,, ...	Wells (Holkham Hall)	102	Denbigh ..	Wrexham (Pack Saddle Res.)	118
Wiltshire..	Landford (Northlands)	117	,, ..	Denbigh (Garn)	112
,, ..	Marlborough College	107	Merioneth	Corwen (Rûg Gardens)	127
Dorset ...	Bere Regis (Bloxworth House)	122	Anglesey .	Llanerchymedd (Llwydiarth Esgob)	121
,, ...	Beaminster (Hamilton Lodge).	108		**SCOTLAND.**	
Devon S...	Plymouth (The Hoe)	109	Dumfries..	Langholm (Ewes)	152
,, ..	Sidmouth (Sidmount)	99	Roxburgh	Kelso (Springwood Park).....	101
,, N. ..	Okehampton (Uplands)	121	Midlothian	Moorfoot Hills (Gladhouse R.)	115
,, ..	Torrington (Enfield)	112	Ayr	Maybole(Culzean Castle Gdns.)	137
Cornwall .	Newquay (Mount Wise)	117	Renfrew ..	Paisley W.W. (Backthornley-muir).	143
,, ..	Falmouth Observatory.....	113	,, ..	Glasgow (Queen's Park).....	126
,, ..	Tresco Abbey.....	120	Argyll	Loch Sunart (Glenborrodale) .	110
Somerset..	Chew Magna	109	,, ...	Corran Lighthouse	127
,, ..	Batheaston Reservoir	121	,, ...	Mull of Kintyre	129
,, ..	Street (Millfield)	106	,, ...	Lock Eck (Benmore)	143
,, ..	Milverton (Spring Grove).....	107	Perth	Glengyle	141
Gloucester	Cheltenham (Montpellier Gns.)	99	,, ...	Perth (Wellshill Cemetery) ...	116
Hereford .	Hereford (Belmont Abbey) ...	94	Angus	Kirriemuir (Lintrathen)	125
Shropshire	Shifnal (Hatton Grange)	106	Aberdeen .	Ellon (Esslemont House)	104
Stafford...	Leek (Wall Grange)	108	Banff	Keith Station.....	91
Worcester	Stourport (Lincombe Lock)...	110	Inverness .	Loch Ness (Foyers)	127
,,	Blockley (Upton Wold)	99	,, .	Loch Quoich (Glenquoich) ...	125
Warwick .	Ryton-on-Dunsmore(RytonHo)	109	Ross	Strathpeffer	125
Leicester .	Kibworth Beauchamp	110		**IRELAND.**	
,, ..	Thornton Reservoir	112	Cork	Cork (University College)	139
Lincoln ...	Spalding (Pode Hole)	108	,, ...	Midleton (Ballinacurra)	131
,, ...	Skegness	100	Kerry	Darrynane Abbey.....	129
,, ...	Louth (Westgate)	91	Wexford ..	Foulkesmill (Longraigue)	141
,, ...	Brigg	106	Carlow....	Carlow (Browne's Hill)	117
Nottingh'm	Nottingham (Strelley)	108	,, .	Hacketstown Rectory.....	122
,,	Worksop (Hodsock Priory) ...	103	Dublin....	Dublin (Phœnix Park)	113
Derby	Buxton (Devonshire Hosp.) ..	107	W'meath. .	Athlone (Twyford House)	127
Cheshire ..	Runcorn (Weston Point)	110	Roscomm'n	Strokestown (Castlenode)	136
,, ..	Woodhead Reservoir	108	Mayo	Delphi Lodge	119
Lancs. C...	Burnley (Swindon) *Lower g.* ..	132	Armagh ..	Lurgan (Belle Vue).....	124
,, ..	Wigan W.W. (Worthington) ..	135	Down	Newry (Bridge Street House) .	133
,, ..	Blackpool (Met. Observatory).	130	,, ...	Donaghadee (Coastguard Stn).	138
,, ..	Garstang (Grisedale Res.)	140			
YorksW.R.	Slaidburn (Dunsop Houses) ..	144			
,,	Goole	113			

* See also Table XXI, pp. 111-115.

II.—EVAPORATION AND PERCOLATION IN 1928.

The *evaporation gauges* in use are square tanks sunk in the ground, and the evaporation which is measured is that from a free water surface. The standard gauge at Camden Square is 6 ft. square and 2 ft. deep, and is sunk so that the lip projects about 3 inches. The routine consists of the daily measurement of the level of the water below a mark fixed to the tank. From the difference between consecutive daily measurements is deducted the rainfall for the same period as measured in an adjacent rain-gauge. The net depression of the water-level in the tank during the interval of 24 hours is taken to be a measure of the evaporation. Sometimes in winter the " evaporation " comes out as a small negative quantity ; this is regarded as due to the condensation of water from the superincumbent air, and the corresponding measurements are marked " C " in the tables. So far as is practicable, the level of the water is kept about 2 to 3 inches below the top of the lip. This necessitates water being added in summer and syphoned off in winter. During the winter months, there is some difficulty in getting a reading when the water freezes. In such cases the ice is broken away from the sides of the tank and the measurement of the water-level is made while the ice is floating. If this cannot be done any morning, owing to the thickness of the ice, a measurement is made as soon as possible (on a subsequent morning), and the amount of evaporation calculated over the whole period. The evaporation is small in winter, so that little information is lost by adopting this procedure.

The accuracy of the measurements of evaporation depend on the depth of water caught as rain in the evaporation tank being identical with that measured directly in the rain-gauge alongside.

Some of the factors which are likely to vitiate the measurements of evaporation were discussed in *British Rainfall,* 1925, pp. 127-128.

The list of stations given in Table XXV, for which details of the evaporation are available for 1928, is the same as last year, except that values are again available for Edinburgh.

The evaporation from a free water surface at each station shows a well-marked seasonal variation. The amount is large in the six summer months, April to September, and much smaller in the remaining months of the year. During 1928 most stations recorded more evaporation than usual, this being associated with the excess of sunshine which prevailed in central and eastern England.

The monthly and annual means for the twelve stations are set out in the last column of the table. For the year the mean evaporation is 16·98 inches. This is ·76 inch and 1·48 inch more than the corresponding figure in 1926 and 1927 respectively. As much as 14·49 inches or 85 per cent. of the total was evaporated in the six summer months. There is a fairly uniform change from a maximum in June to a minimum in December and January.

The evaporation from a free water surface during 1928 was greatest in July at all stations except Talla, where the maximum occurred in May. The evaporation for July was larger than usual, unlike that of July, 1927, when the month was particularly dull. The large values for July, in comparison with those for June and August, is in accord with the rainfall, July being a dry month and June and August in most cases, wetter than usual.

The monthly evaporation values for the 44 years, 1885 to 1928, at Camden Square are set out in Table XXVII. For 1928 the evaporation of 16·29 inches was ·79 inches more than the average for the 35 years, and the largest since the exceptionally dry year 1921, when the evaporation was 19·69 inches. In the last 17 years the evaporation recorded in 1928 has been exceeded only once. Recently there has been therefore a run of wet years with relatively little evaporation. On the other hand in the first 22 years of the evaporation record at Camden Square the total for 1928 was exceeded in as many as 8 years.

In Table XXVI the amount of water which percolates through a definite depth of soil is given. Details of the percolation gauges and the type of soil are set out in the footnotes and in *British Rainfall*, 1924, p. 128. The difference between percolation and rainfall is largely to be accounted for by evaporation, but evaporation as determined in this way (known as " calculated evaporation ") is not strictly comparable with that given in the earlier table. There is no free water surface present in the percolation gauge, but during dry periods the surface soil is nearly dry, so that practically no evaporation can take place.

At Compton no rain percolated through the gauge (which consists of 10 in. of soil, on which grass is grown, over 2 ft. of well rammed chalk) from May to September. At Rothamsted percolation was little during each of the six summer months. At Grayshott, Harrogate and Craibstone the percolation was least during the late summer—July, August and September. A large percolation did not occur after the spring until November at Craibstone in the case of the two gauges where the ground is manured and the crop therefore abundant.

The values for the calculated evaporation are rather more erratic than usual. This is partly due to the fact that at most stations the percolation appreciably exceeded the rainfall in January and at Compton and Grayshott in February as well. Part of the percolated water recorded in 1928 actually fell as rain during the later months of 1927.

Table XXV—*Evaporation in* 1928.

List of Stations.	County.	Observer.	Particulars of Tank. Height above Ground.	Height above Sea Level.	Side.	Capacity.
			ft. in.	ft. in.	ft. in.	Gals.
Camden Square	London 2	Royal Meteor. Soc. ..	0 3	111	6 0	450
Otterbourne ..	Hampshire 5	E. C. Rodda, Esq. ..	0 3	112	6 0	450
Petersfield	,, ...6	C. J. P. Cave, Esq. ..	0 3	747	4 0	250
Ormesby St. M.	Norfolk 2	Gt. Yarmouth W.W.	0 3	21	6 0	450
Kennick	South Devon 5	S. C. Chapman, Esq.	0 3	835	6 0	450
Revesby	Lincoln 3	T. Henry Tyson, Esq.	0 6	124	6 0	450
Southport	Cen. Lancashire..3	J. Baxendell, Esq. ..	0 3	37	3 0	112
Ardsley, No. 1	Yorkshire, W.R. 8	C. C. Smith, Esq. ..	0 3	395	6 0	450
,, No. 2	,, ,, 8	,,	0 3	326	6 0	450
Lower Laithe..	,, ,, 9	M. R. Barnett, Esq...	0 6	772	6 0	450
Harrogate	,, ,, 11	A. S. West, Esq.	0 3	589	6 0	450
Talla Water ..	Peebles 1	Messrs. Leslie & Reid	0 3	904	6 0	450
Edinburgh	Midlothian 5	Sir T. Hudson Beare	0 3	227	4 0	200

1928.	Camden Square.	Otterbourne.	Petersfield.	Ormesby St. Michael.	Kennick.	Revesby.	Southport.
	in.	in.	in.	in.	in.	in.	in.
January.....	c ·04	c ·03	·09	·08	·09	·42	·04
February.....	·23	·52	·27	·11	·22	·57	·38
March	·70	·75	·61	·61	·66	·89	·63
April	1·33	1·54	1·43	1·75	1·74	1·61	1·59
May.....	2·15	2·65	2·60	2·44	2·84	2·24	2·39
June.....	3·04	3·24	2·96	3·04	3·07	2·44	2·82
July	4·08	4·55	4·13	3·37	4·52	2·96	3·26
August.....	2·17	2·98	2·46	2·42	2·78	2·53	2·23
September.....	1·67	2·26	1·88	2·21	2·27	1·54	1·39
October	·57	1·02	·63	1·05	·92	1·28	·65
November	·36	·52	·32	·60	·29	·57	·29
December	·03	c ·03	c ·02	·35	·14	·33	·23
Year.....	16·29	19·97	17·36	18·03	19·54	17·38	15·90
Average, 1908–1928	15·15	19·54	..	..	18·70	14·66	..
Difference	+ 1·14	+ ·43	..	..	+ ·84	+ 2·72	..

1928.	Ardsley. No. 1.	Ardsley. No. 2.	Lower Laithe.	Harrogate.	Talla Water.	Edinburgh	Mean of 13 Records
	in.	in.	in.	in.	in.	in.	in.
January.....	·20	·09	·07	·35	·24	·23	·14
February.....	·35	·23	·34	·82	·29	·69	·39
March	·62	·53	·32	·88	·27	·62	·62
April	1·94	1·63	1·37	1·81	1·75	1·28	1·60
May.....	2·18	1·84	1·67	2·32	2·68	1·97	2·31
June.....	3·03	2·75	2·52	3·30	1·99	2·31	2·81
July	4·05	3·72	3·71	3·81	1·98	3·06	3·63
August.....	2·68	2·16	2·11	2·73	1·70	1·78	2·36
September.....	1·94	1·52	1·81	1·92	1·38	1·49	1·79
October	·82	·64	·35	1·37	·68	·49	·81
November	·58	·39	·28	·78	·09	·16	·40
December	·10	·06	c ·01	·25	·04	·19	·13
Year.....	18·49	15·56	14·54	20·34	13·09	14·27	16·98
Average, 1908–1928	17·29	..	..	19·11	15·95	..	..
Difference	+ 1·20	..	..	+ 1·23	− 2·86	..	..

NOTE.—In the Table c indicates an excess of condensation over evaporation.

Table XXVI—*Rainfall, Percolation and Calculated Evaporation in* 1928.

(Unless otherwise stated the size of the percolation gauges is 3ft. × 3ft. × 3ft.)

1928.	Compton, Sussex.		Grayshott, Hants.		Harrogate, Yorks.	
	Rainfall.	Percolation.	Rainfall.	Percolation.	Rainfall.	Percolation.
	in.	in.	in.	in.	in.	in.
January	7·22	8·81	5·41	6·43	6·69	..
February	2·61	2·99	2·56	2·89	2·91	..
March	2·83	2·00	3·16	2·32	2·65	..
April	2·39	2·02	2·35	2·70	·92	..
May	1·76	·00	2·46	1·05	2·29	..
June	3·16	·00	2·85	·58	5·46	..
July	1·96	·00	2·10	·06	·88	·08
August	2·51	·00	2·16	·00	4·00	·47
September	1·26	·00	1·53	·00	·44	·03
October	9·50	4·08	7·35	5·90	5·16	2·22
November.....	4·56	4·45	3·50	3·73	3·71	3·68
December	4·21	3·93	3·36	3·22	1·58	1·35
Year	43·97	28·28	38·79	28·88	36·69	..
Calculated Evaporation ..	..	15·69	..	9·91	..	..

1928.	¶ Rothamsted, Herts.				¶ Craibstone, Aberdeen.			
	Rainfall.	Percolation.**			Rainfall.	Percolation. §		
		20 in. Soil.	40 in. Soil.	60 in. Soil.		1 * 40 in. Soil.	2 † 40 in. Soil.	3 ‡ 40 in. Soil.
	in.	in.	in.	in.	in.	in.	in.	in.
January ...	3·69	4·41	5·66	4·57	4·55	4·56	4·50	4·30
February ..	1·83	1·45	1·83	1·71	·76	·84	·76	·65
March	2·09	1·09	1·32	1·28	3·89	2·74	2·51	2·42
April	·76	·35	·65	·59	2·19	1·51	1·52	1·45
May.....	1·30	·07	·17	·14	1·75	·41	·31	·18
June	2·09	·16	·28	·25	3·42	·28	·07	·02
July	2·33	·46	·44	·43	1·73	·03	·01	·00
August	2·02	·50	·73	·67	3·11	·00	·00	·00
September .	·68	·00	·04	·02	2·85	·01	·00	·02
October ...	3·55	2·29	2·46	2·28	2·66	1·33	·65	·09
November .	2·92	2·22	2·65	2·45	3·92	3·30	3·18	2·69
December..	2·46	2·04	2·48	2·34	2·93	2·52	2·26	1·92
Year	25·72	15·04	18·71	16·73	33·76	17·53	15·77	13·74
Calculated Evaporation	..	10·68	7·01	8·99	..	16·23	17·99	20·02

** Through bare unworked soil. § The gauges were under Oats. * Unmanured.
† Manured. ‡ Manured and limed. ¶ Area of gauges one thousandth of an acre.

Table XXVII.—*Evaporation at Camden Square*, 1885-1928.

	Jan. in.	Feb. in.	Mar. in.	April. in.	May. in.	June. in.	July. in.	Aug. in.	Sept. in.	Oct. in.	Nov. in.	Dec. in.	Total. in.
1885	·20	·38	·86	1·71	1·98	2·77	3·29	2·25	1·13	·77	·17	·11	15·62
1886	·23	·13	·53	1·59	1·78	2·93	3·12	1·86	1·46	·63	·27	·12	14·65
1887	c·07	·29	·76	1·72	1·79	3·68	3·76	2·54	1·25	·78	·21	·07	16·78
1888	·07	·37	·48	1·16	2·71	2·24	1·44	1·90	1·17	·60	·43	·03	12·60
1889	·03	·18	·62	1·07	1·76	2·97	2·34	1·96	1·52	·42	·29	c·13	13·03
1890	·08	·19	·50	1·44	2·63	2·14	2·33	2·02	1·27	·79	·31	·04	13·74
1891	·03	·16	·73	1·35	1·66	2·83	2·34	1·67	1·00	·62	·20	·22	12·81
1892	·05	·09	·60	1·88	2·65	3·05	2·84	2·20	1·01	·36	·02	·20	14·95
1893	c·03	·01	·92	2·33	3·06	3·62	3·12	2·85	1·48	·70	·11	·01	18·18
1894	c·04	·28	·83	1·17	2·10	2·48	2·49	1·91	·97	·37	·20	·11	12·87
1895	·14	·64	·36	1·26	3·06	3·31	3·07	2·12	1·27	·54	·19	·07	16·03
1896	·16	·24	·64	1·57	3·06	3·21	3·63	1·96	·68	·47	·18	·00	15·80
1897	·23	·21	·76	1·23	2·99	2·48	3·60	2·49	·99	·63	·26	c·14	15·73
1898	·19	·37	·51	1·28	1·56	2·10	2·96	2·53	1·73	·45	·11	·16	13·95
1899	·04	·28	·52	1·24	2·34	3·67	4·03	3·78	2·01	·45	·41	·11	18·88
1900	·03	·16	·80	1·46	2·35	2·85	4·25	2·61	1·61	·89	·24	·15	17·40
1901	·13	·24	·60	1·98	3·25	3·85	3·37	3·19	1·42	·64	·31	c·05	18·93
1902	·16	·15	·71	1·75	1·78	2·33	3·30	1·71	1·47	·69	·28	·27	14·60
1903	·26	·39	·97	1·57	2·24	2·79	3·35	2·53	1·51	·86	·29	·12	16·88
1904	c·09	·26	·54	1·68	1·81	3·32	4·06	2·86	1·20	·50	·26	·02	16·42
1905	·17	·35	·65	1·14	3·19	2·49	3·65	2·23	1·24	·78	·09	·16	16·14
1906	·06	·21	·73	1·90	1·90	3·53	3·65	3·46	2·38	·78	·27	·16	19·03
1907	·21	·38	1·02	1·27	1·93	2·47	2·65	2·24	1·72	·49	·27	·19	14·84
1908	·05	·27	·56	1·32	2·23	3·77	2·75	2·47	1·25	·48	·29	·14	15·58
1909	·14	·30	·30	1·85	2·93	1·70	2·60	2·23	·84	·76	·17	·16	13·98
1910	·22	·17	·80	1·43	2·52	2·57	2·00	2·12	1·42	·76	·19	·10	14·30
1911	·15	·32	·59	1·77	2·58	3·34	4·60	3·19	1·96	·64	·37	·02	19·53
1912	·24	·16	·79	2·34	2·44	2·49	2·55	1·69	1·41	·39	·33	·12	14·95
1913	·10	·32	·77	1·25	2·49	3·13	2·15	2·09	1·07	·61	·36	·32	14·66
1914	·09	·24	·52	1·84	2·56	2·93	2·72	1·99	1·68	·70	·28	·05	15·60
1915	·11	·13	·66	1·65	2·90	3·15	2·50	1·76	1·61	·56	·25	c·03	15·25
1916	·19	·34	·30	1·61	2·32	2·20	2·23	2·34	1·20	·76	·34	c·04	13·79
1917	·11	·17	·53	1·18	3·06	3·01	2·81	1·95	1·16	·75	·34	·12	15·19
1918	·14	·27	·85	·89	2·38	3·01	2·59	2·04	1·69	·40	·24	·16	14·66
1919	c·12	·13	·66	1·06	2·94	3·39	1·90	2·78	1·53	·61	·08	·06	15·02
1920	·20	·24	·78	·85	2·71	2·85	2·09	2·00	1·04	·66	·04	·00	13·46
1921	·20	·28	·96	1·91	3·04	3·66	4·17	2·56	1·72	·72	·19	·28	19·69
1922	·16	·31	·96	1·20	2·93	3·36	2·09	1·74	1·11	·66	·27	·14	14·93
1923	c·01	·16	·65	1·26	2·16	2·16	3·59	2·79	1·24	·73	·24	·02	14·99
1924	c·17	·28	·73	1·28	2·27	2·91	3·21	1·82	1·11	·59	·33	·11	14·47
1925	·12	·30	·83	1·30	2·34	3·48	2·61	1·58	1·01	·56	·37	·00	14·50
1926	c·03	·12	1·03	1·06	2·07	2·50	2·51	2·12	1·34	·74	·20	·05	13·71
1927	·05	·19	·65	1·45	2·91	2·64	2·01	1·75	1·08	·37	·29	·13	13·52
1928	c·04	·23	·70	1·33	2·15	3·04	4·08	2·17	1·67	·57	·36	·03	16·29
Average 1885–1919 ..	·10	·25	·66	1·51	2·43	2·91	2·97	2·33	1·38	·62	·25	·09	15·50
Difference 1928	—·14	—·02	+·04	—·18	—·28	+·13	+1·11	—·16	+·29	—·05	+·11	—·06	+·79

NOTE.—c indicates condensation.

METEOROLOGICAL OFFICE, AIR MINISTRY.

BRITISH RAINFALL ORGANIZATION.

BRITISH RAINFALL, 1928.

PART III.

GENERAL TABLE

OF

TOTAL RAINFALL IN 1928

AT

STATIONS

IN

GREAT BRITAIN AND IRELAND

WITH THE NAMES OF

THE OBSERVERS

OR OTHER AUTHORITIES FOR THE OBSERVATIONS.

ISSUED BY THE AUTHORITY OF THE METEOROLOGICAL COMMITTEE

GENERAL TABLE OF TOTAL RAINFALL IN 1928.

EXPLANATORY NOTE.

The Divisions of Great Britain in the General Table are the same as those adopted by the Registrars-General of England and Scotland.

The counties are divided up into numbered areas, corresponding to the river-basins. An account of these river-divisions for England and Wales was given in a special article in Part I of *British Rainfall*, 1910 (pp. 37-66), and a similar article on the river-divisions of Scotland and Ireland appeared in Part I of *British Rainfall*, 1911 (pp. 40-72), with detailed maps showing all the river-divisions in each Division. Reprints of these articles are available. The areas of the river basins of the Great Ouse and tributaries in Norfolk and Cambridge were redetermined in 1928; the values printed in this volume and in the volume for 1927 differ slightly from those published in *British Rainfall* from 1910 to 1926. The sequence of river divisions in Great Britain proceeds anti-clockwise from the Solway Firth. For example, in the West Riding of Yorkshire we have four divisions for rivers flowing to the Irish Sea, followed by eight divisions for rivers tributary to the Humber.

The stations in each river-division are arranged nearly in the order of their latitude from South to North. For convenience, the first name defining a station is that of a place which can be found on any large scale map; occasionally it is in an adjoining county. The second name is added to fix the site of observation more closely, *e.g.*, "Haslemere (Clammer Hill)" means Clammer Hill, near Haslemere.

In some cases the records have been received from a local rainfall organization. This has been indicated by a footnote.

In the column headed "Diameter," figures in old style type indicate the length of the sides of rectangular gauges.

The letter D signifies that daily observations have been received and are complete for the year; d, that less complete daily records have been received; w indicates that weekly readings have been received, and M that the gauge is read only once a month, usually on the 1st.

(R) denotes that the gauge is a mechanical one, the correct reading of which depends on the mechanism being in working order.

(A) denotes that the amount of rainfall is taken from the chart of an autographic instrument.

(+A) denotes that the amount of rainfall is taken from an ordinary gauge and that an autographic instrument is also in use.

Where two or more gauges are maintained at the same station the comparison of the records is seldom of general interest. The rule has now been adopted that in such cases only one record will normally be published in *British Rainfall.* The use of mechanical gauges for measuring the total rainfall is not recommended by the Meteorological Office, and the number of records marked (R) or (A) is therefore small.

Gauges which have been inspected and found to be over-exposed on moorland have been so marked. It is likely that there are other gauges (notably some of those at lighthouses) which are also over-exposed.

The column for the total rainfall in millimetres, which was a feature of the corresponding table in the volumes for the years 1914 to 1925, has been omitted since 1926, and the space thus set free is devoted to a column for average annual totals, expressed in inches, to the nearest tenth of an inch. The averages do not all refer to a single period of time and they are not necessarily therefore strictly comparable with one another. The rule which has been adopted is that all available averages are admitted to this table (*a*) which are derived from reliable observations extending over a period of at least 20 years; (*b*) which, after critical examination of available records have been reduced by the accepted method to the standard period of 35 years, 1881—1915. Averages for this standard period, if available, are always preferred for entry in the table.

A few entries of total rain will be found in brackets—indicating that the values have been corrected; *e.g.*, when snow has been lost, when the amount for a short period has been computed from other records, or when the gauge has been moved a short distance during the year. A record is not as a rule printed if the gauge has been moved more than a mile, or if there is a greater difference than 50 ft. of altitude between the two positions.

A note of interrogation (?) implies doubt, not necessarily error. The absence of information is indicated by ..

COUNTY INDEX TO GENERAL TABLE.

ENGLAND.

Bedford	162	Hereford	182	Oxford	159
Berkshire	154	Hertford	157	Rutland	188
Buckingham	158	Huntingdon	161	Shropshire	183
Cambridge	162	Kent	145	Somerset	177
Cheshire	192	Lancashire	193	Stafford	184
Cornwall and Scilly	176	Leicester	187	Suffolk	165
Cumberland	208	Lincoln	188	Surrey	141
Derby	190	London	140	Sussex	148
Devon	171	Middlesex	156	Warwick	186
Dorset	170	Monmouth	210	Westmorland	209
Durham	206	Norfolk	167	Wiltshire	168
Essex	163	Northampton	160	Worcester	185
Gloucester	180	Northumberland	207	Yorkshire	198
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WALES.

Anglesey	220	Carnarvon	219	Merioneth	218
Brecon	214	Denbigh	217	Montgomery	216
Cardigan	213	Flint	217	Pembroke	213
Carmarthen	212	Glamorgan	211	Radnor	216

ISLANDS.

Isle of Man	220	Channel Islands	220

SCOTLAND.

Aberdeen	238	Fife	233	Peebles	224
Angus (Forfar)	237	Haddington	225	Perth	234
Argyll	231	Inverness	240	Renfrew	229
Ayr	228	Kincardine	237	Ross and Cromarty	241
Banff	239	Kinross	233	Roxburgh	223
Berwick	224	Kirkcudbright	222	Selkirk	224
Bute	231	Lanark	227	Shetland	243
Caithness	243	Linlithgow	226	Stirling	230
Clackmannan	233	Midlothian	225	Sutherland	242
Cromarty and Ross	241	Moray (Elgin)	239	Wigtown	222
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IRELAND.

Antrim	254	Kerry	245	Monaghan	252
Armagh	253	Kildare	248	Offaly (King's Co).	248
Carlow	248	Kilkenny	247	Roscommon	251
Cavan	252	Leitrim	252	Sligo	251
Clare	246	Leix (Queen's Co.)	248	Tipperary	245
Cork	244	Limerick	246	Tyrone	255
Donegal	255	Londonderry	254	Waterford	245
Down	253	Longford	250	Westmeath	250
Dublin	249	Louth	250	Wexford	247
Fermanagh	252	Mayo	251	Wicklow	247
Galway	250	Meath	249		

ENGLAND AND WALES.

DIVISION I.—LONDON. (Area, 117 sq. mi.)

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge: Height of Rim above Ground.	Rain-gauge: Height of Ground above Sea Level.	Average Rainfall.	1928: Rainfall.	1928: Days with ·01 in. or more.	1928: Days with ·04 in. or more.
1.—THAMES.—Right Bank Tributaries. 67. sq. mi.		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
BERMONDSEY.								
D Southwark Park	London County Council	5	1 0	9	..	26·98	168	128
LAMBETH.								
D Brockwell Park	London County Council	5	1 0	120	..	26·57	170	117
d Brixton Hill Reservoir	Met. Water Board	5	1 1	121	..	27·28	179	125
BATTERSEA.								
D Battersea Park	London County Council	5	1 0	13	..	25·33	170	125
D Battersea Waterworks	Met. Water Board	5	1 0	6	22·6	25·41	169	126
WANDSWORTH.								
D Streatham (Conyers Road)	Met. Water Board	5	1 0	119	23·6	26·52	176	132
d Streatham Hill Reservoir	Met. Water Board	5	1 0	205	..	26·26	167	124
D Putney Heath Reservoir	Met. Water Board	5	1 6	180	24·9	23·57	175	128
D Balham High Road (+A)	E. J. Elford, Esq., C.E.	5	1 6	89	..	27·26	175	129
D Wandsworth Common	L. Parmee, Esq.	5	1 0	100	..	25·16	159	120
D Southfields (CoronationGds) (+A)	E. J. Elford, Esq., C.E.	5	1 6	37	..	26·93	176	127
D Southfields (Wincanton Rd.)	A. T. Bench, Esq.	5	1 2	50	..	27·29	181	136
D Larkhall Rise	Guy M. Quiller, Esq.	5	1 1	55	..	23·20	169	117
CAMBERWELL.								
D Nunhead (Nunhead Reservoir)	Met. Water Board	5	1 0	175	23·1	24·25	161	122
D Dulwich College	E. W. Goodman, Esq.	5	1 0	150	..	23·41	146	111
DEPTFORD.								
D Telegraph Hill	London County Council	5	1 0	135	..	23·32	168	120
D Waterworks	Met. Water Board	5	1 0	20	23·0	25·49	168	125
GREENWICH.								
D Deptford Pumping Station (+A)	London County Council	8	1 0	18	24·9	23·99	154	117
D Royal Observatory	Sir F. W. Dyson, F.R.S.	8	0 5	149	23·5	25·25	165	122
D Westcombe Park Road	Rev. T. R. Price	8	1 3	154	..	25·16	177	125
LEWISHAM.								
D Forest Hill Reservoir	Met. Water Board	5	1 3	337	25·9	27·88	177	138
D Clarendon Road	G. E. Dacey, Esq.	5	1 0	98	..	29·25	206	134
WOOLWICH.								
D Eltham (High Street)	Met. Water Board	5	1 0	245	24·3	26·49	156	123
2.—THAMES.—Left Bank Tributaries. 50 sq. mi.								
KENSINGTON.								
D Harley Gardens	Mrs. Hamlyn Price	5	1 5	29	..	25·18	181	138
D Holland House	Mr. P. B. Rintoul	5	1 6	69	24·9	24·82	162	127
d Cam House	The late Lord Phillimore	5	3 0	100	..	24·97	..	125
D Campden Hill Reservoir	Met. Water Board	5	1 0	142	27·5	24·04	156	124
D Kensington Palace (+A)	The Meteorological Office	8	1 0	80	..	26·81	182	139
HAMMERSMITH.								
D The Creek	London County Council	5	3 0	19	..	26·37	172	138
FULHAM.								
D Hammersmith Cemetery	R. J. Brown, Esq.	5	1 0	17	..	24·84	153	119

DIVISION I.—LONDON—(*con.*).

	STATIONS.	AUTHORITIES.	Diam.	Rain-gauge Height of Rim above Ground.	Rain-gauge Height of Ground above Sea Level.	Average Rainfall.	1928 Rainfall.	1928 Days with ·01 in. or more.	1928 Days with ·04 in. or more.
	2.—THAMES—Left Bank Tributaries—(*con.*).		*in.*	*ft. in.*	*ft*	*in.*	*in.*		
	CHELSEA.								
D	Physic Garden	W. Hales, Esq.	5	1 0	20	23·8	25·67	169	129
D	Oakley Street	A. Hampton Brown, Esq.	5	1 0	25	..	24·04	176	123
D	St. Luke's Gardens	W. R. Manning, Esq., C.E.	5	1 0	25	24·9	23·57	185	120
	WESTMINSTER.								
D	Western Pumping Station	London County Council	8	1 0	19	23·5	23·63	167	117
D	King's Scholar's Pond	London County Council	8	11 6	31	..	22·46	168	116
D	Buckingham Palace	Mr. W. Osborne	5	8 0	35	24·9	25·70	181	135
D	Kensington Gardens	Prof. S. M. Dixon	5	1 0	78	..	25·86	171	126
D	St. James's Park (+A)	The Meteorological Office	8	1 0	27	22·4	24·50	162	125
D	Spring Gardens	London County Council	8	6 0	35	24·0	23·03	168	124
	ST. MARYLEBONE.								
D	Royal Botanic Gardens	J. L. North, Esq.	8	1 0	130	26·6	27·97	186	141
	HAMPSTEAD.								
D	Barrow Hill Reservoir	Met. Water Board	5	1 0	175	25·2	26·59	168	130
d	Kidderpore Reservoir	Met. Water Board	5	1 0	328	24·8	28·49	..	129
D	Observatory	E. L. Hawke, Esq.	8	1 0	450	..	31·04	221	142
d	Golders Hill Park	London County Council	5	1 0	350	..	29·98	(175)	(152)
	ST. PANCRAS.								
D	Camden Square (+A)	Royal Meteorological Soc.	8	1 0	110	24·5	26·04	175	132
D	Camden Square *Snowdon*	Royal Meteorological Soc.	5	1 0	110	24·5	26·00	175	132
M	Camden Square	Royal Meteorological Soc.	5	1 0	110	..	26·20	..	..
	STOKE NEWINGTON.								
D	New River Filter Beds	Met. Water Board	5	1 3	101	24·6	25·00	170	128
D	New River Reservoirs	Met. Water Board	5	1 0	105	25·4	24·43	168	121
	HACKNEY.								
D	Clapton Pond (+A)	P. Holt, Esq., C.E.	5	1 0	69	24·2	21·80	159	113
	HOLBORN.								
	FINSBURY.								
D	New River Head	Met. Water Board	8	1 0	95	23·5	23·48	170	123
	BETHNAL GREEN.								
d	Victoria Park	London County Council	5	1 0	43	..	22·94	..	124
	POPLAR.								
D	Isle of Dogs (Island Gardens)	London County Council	5	1 0	18	..	23·62	168	121
D	Old Ford Pumping Station	Met. Water Board	8	0 9	19	23·7	24·10	168	132
D	Old Ford (Penstock House) (+A)	London County Council	8	1 0	43	23·6	23·80	159	121
	WOOLWICH.								
D	N. Woolwich Pumping Stn. (+A)	London County Council	8	0 9	12	22·9	23·68	159	119
D	Barking Outfall	London County Council	8	0 9	0	21·8	23·13	162	115

DIVISION II.—SOUTH EASTERN COUNTIES.

SURREY. (Area, 725 sq. mi.).

1.—ARUN. 45 sq. mi.

D	Haslemere (Clammer Hill)	Mrs. Glennie	5	1 6	400	35·8	38·52	176	139
D	Haslemere (Grayshurst)	C. W. Dixon, Esq.	5	1 0	621	..	37·55	179	141
D	Chiddingfold (Stonehurst)	H. St. John H. Bashall, Esq.	5	1 1	200	..	36·03	164	133
D	Hambledon (Rossall)	L. R. Furneaux, Esq.	5	1 0	250	..	36·39	197	141

2.—MEDWAY. 50 sq. mi.

D	East Grinstead (Lockeridge)	Lt.-Col. J. F. Forbes, D.S.O.	5	1 0	320	..	36·24	188	148
D	Dormans Park (Chartham Park)	I. D. Margary, Esq.	5	1 0	270	..	34·76	183	141
D	Dormans Park (Hill Crest)	Mrs. H. R. Mill	5	1 0	320	..	36·03	204	142

DIVISION II.—SOUTH-EASTERN COUNTIES—(*con.*).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge Height of Rim above Ground.	Rain-gauge Height of Ground above Sea Level.	Average Rainfall.	1928 Rainfall.	1928 Days with ·01 in. or more.	1928 Days with ·04 in. or more.
SURREY—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
2.—MEDWAY—(*con.*).								
D Lingfield (Felcourt)	R. McAlpine, Esq.	5	1 3	225	..	35·03	177	146
D S. Godstone (Hartsridge)	F. E. Goad, Esq.	5	0 10	450	..	31·91	191	144
D Lingfield (Tandridge)	Miss A. Debenham	5	0 8	..	..	29·40	179	140
D Bletchingley (North Park Farm)	S. W. Searles, Esq.	5	1 0	200	..	34·35	192	151
D Oxted (Stone Hall)	W. P. Metcalfe, Esq.	5	1 5	320	..	31·91	189	141
D Oxted (West Heath)	Norman W. Grieve, Esq.	8	1 2	500	..	34·17	186	149
3.—THAMES—Darent. 22 sq. mi.								
D Tatsfield School	B. Hammond, Esq.	5	1 8	741	..	35·92	165	134
Chelsham (Ledgers)	Mrs. H. A. Daniell	5	1 5	620	..	(33·63)	..	..
D Farleigh (Croydon Ment. Hosp.)	Croydon Corporation	8	1 0	100	..	35·07	180	152
Chelsham (Fairchildes)	A. S. Daniell, Esq.	5	1 0	600	33·7	35·43	..	..
D Addington (Hares Bk. Pump. Sta.)	Croydon Corporation	8	1 0	331	..	35·27	204	152
D Addington Hills Reservoir	Croydon Corporation	8	1 0	472	29·4	32·64	187	145
D Norwood (Auckland Road)	Miss J. Cooper	5	1 5	230	23·7	25·82	169	121
4.—THAMES—Wandle. 71 sq. mi.								
D Kingswood (Margery Hall Res.)	W. Vaux Graham, Esq., C.E.	5	1 0	691	..	34·50	178	146
Woldingham Reservoir	W. Vaux Graham, Esq., C.E.	5	1 6	851	..	36·25	..	..
M Woldingham Reservoir (New G)	W. Vaux Graham, Esq., C.E.	5	1 6	841	..	37·85	..	..
D Caterham Reservoir	A.E.Cornewall-Walker, Esq.	5	1 2	717	34·6	34·80	203	152
D Caterham Valley (Croydon Rd.)	A. M. Worfolk, Esq.	5	6 0	435	..	40·23	171	144
D Tadworth (Glade House)	W. J. Saunders, Esq.	5	1 6	545	..	35·52	203	146
d Caterham (Mental Hospital)	Dr. P. M. Turnbull	5	1 0	600	..	(34·71)	(211)	(145)
D Chelsham & Woldingham W.	W. Vaux Graham. Esq., C.E.	5	1 6	479	..	37·89	173	155
D Woldingham (Marden Park)	S. W. Searles, Esq.	5	1 0	300	..	37·87	184	144
D Warlingham (Council School)	R. W. Peacock, Esq.	5	1 0	600	..	35·24	185	152
D Caterham Valley Depot	A.E.Cornewall-Walker, Esq.	5	1 6	431	..	38·15	212	154
D Banstead (Burgh Heath)	Capt. E. R. Taylor	5	1 0	571	32·6	32·61	174	141
D Banstead (Burgh Heath Res.)	W. Vaux Graham, Esq., C.E.	5	1 0	600	32·7	32·32	168	142
M Chipstead (How Green Res.)	W. Vaux Graham, Esq., C.E.	5	1 0	528	..	35·55	..	..
D Kenley Pumping Station	A.E.Cornewall-Walker, Esq.	5	1 6	275	..	33·26	190	145
Coulsdon	J. H. Lowe, Esq.	5	0 6	400	..	32·66	180	147
D Banstead Mental Hospital	S. J. Wray, Esq.	5	4 6	425	..	29·79	176	157
D Purley (Oakwood Avenue)	E. W. Finch, Esq.	5	1 0	380	..	31·05	191	138
D Purley (Downscourt Rd.)	J. Edmund Clark, Esq.	5	1 0	360	30·9	32·65	193	141
D Purley (Pumping Station)	A.E.Cornewall-Walker, Esq.	5	1 3	225	30·1	35·14	198	157
D Purley (Russell Hill)	Mrs. Gillbee	5	1 0	350	..	33·93	168	136
D Purley (Hillcrest Road)	W. J. Fisher, Esq.	8	1 6	370	..	32·24	186	149
D Purley (St. Mark's Vicarage)	Mrs. Shattock	5	1 0	336	..	31·43	168	134
D Croydon Aerodrome (+A)	The Meteorological Office.	8	1 0	244	26·7	29·87	175	126
D South Croydon (Avondale Road)	G. Macdonald Davies, Esq.	5	1 0	195	29·4	(33·21)	(193)	(138)
d South Croydon (Harewood Rd.)	Mrs. Morland	6	0 8	300	..	31·21	..	121
D Carshalton (Sewage Works)	Surveyor, U.D.C.	5	1 0	118	25·9	28·56	157	122
d Carshalton (The Grove)	H. J. Spicer, Esq.	8	1 0	130	..	27·95	..	121
D Beddington (Sewage Farm)	Croydon Corporation	5	1 0	129	..	26·75	173	125
D Croydon (Northampton Road)	Mrs Higgins	5	1 0	210	..	30·09	177	133
D Beddington Cor. (Millgreen Rd.)	S. C. Miller, Esq.	5	5 0	77	26·2	30·46	163	131
D Wimbledon (Trinity Road)	P. J. Bevan, Esq., C.E.	5	1 0	53	..	26·20	160	119
D Wimbledon (Compton Road)	G. H. Cheesman, Esq.	5	1 6	80	..	25·37	165	124
D Wimbledon (Sewage Pmp. Sta.)	J. Bowen, Esq., C.E.	5	1 0	55	..	25·99	158	125
5.—THAMES—Mole & c. 229 sq. mi.								
d Horley (Wrays)	A. R. Allcroft, Esq.	5	1 0	290	..	38·06	..	132
D Outwood (The Orchards)	H. Gurney, Esq.	5	1 0	274	26·0	33·54	181	152
D Dorking (Bramerton)	Rev. Jas. F. Twist	5	1 0	300	..	35·10	174	135
Dorking (Denbies)	Mr. J. Ansell	5	0 6	610	32·2	37·61	173	..
D Brockham	H. R. Kempe, Esq. C.E.	8	0 9	180	31·2	32·07	151	124

DIVISION II.—SOUTH-EASTERN COUNTIES—(*con.*).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge Height of Rim above Ground.	Rain-gauge Height of Ground above Sea Level.	Average Rainfall.	1928 Rainfall.	1928 Days with ·01 in. or more.	1928 Days with ·04 in. or more.
SURREY—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
5.—THAMES—Mole & c.—(*con.*).								
D Betchworth (Snower Hill)	T. DuBuisson, Esq.	8	0 11	250	..	33·19	184	143
South Nutfield (Hale Edge)	R. C. Grant, Esq.	5	1 0	250	28·7	30·97	176	144
D Earlswood (Sewage Farm)	F. T. Clayton, Esq., C.E.	5	1 6	196	..	30·64	183	137
D Redhill (Warwick Road)	A.E.Cornewall-Walker,Esq.	5	1 6	284	..	31·81	181	140
D Reigate (The Knowle)	G. Weston, Esq.	5	1 0	390	29·9	31·88	176	141
D Reigate (Woodcote)	Herbert Crosfield, Esq.,J.P.	5	0 10	310	..	31·82	177	135
D Reigate (Wray Park Road)	W. J. MacAndrew, Esq.	5	1 0	330	..	33·62	185	140
D Reigate (Castle Grounds)	F. T. Clayton, Esq., C.E.	5	1 6	350	30·4	35·84	246	156
D Reigate (Thurso)	F. S. Smith, Esq.	8	1 0	270	..	29·12	170	122
D Nutfield Priory	J. Moffatt, Esq.	8	1 2	313	31·5	30·59	196	137
D Nutfield (Elstree)	D. Morphew, Esq.	5	1 0	430	..	30·28	195	140
D Bletchingley (South Park Fm).	Uvedale H. Lambert, Esq.	5	1 0	340	31·4	31·33	156	128
D Headley Rectory	Rev. T. E. R. Phillips	5	1 0	570	..	34·66	187	135
D Headley (The Hurst)	Mrs. Lyall	5	1 3	420	32·2	32·02	153	130
D Walton-on-the-Hill	Mr. J. Millichamp	5	1 0	600	31·7	32·74	191	137
D Fetcham W.W. †	A.E.Cornewall-Walker,Esq.	5	1 0	102	..	31·14	185	137
D Tadworth	G. B. Wall, Esq.	5	1 4	550	..	37·96	227	151
D Ashtead (The Hut)	Mr. E. Langridge	5	1 0	200	..	30·13	182	129
D Epsom (Sewage Farm)	E. R. Capon, Esq., C.E.	8	1 0	120	25·4	24·74	160	122
D Whiteley Village (Fox Oak)	H. E. Cooke, Esq.	8	3 4	195	..	25·32	170	124
D Cobham (Uplands)	R. S. Morrish, Esq.	5	0 6	180	..	30·44	167	135
Weybridge (St. George's Hill)	Mrs. Buckley	5	0 10	200	..	27·11	..	..
D Sutton (Camborne Road)	F. E. Wright, Esq.	5	1 0	250	29·3	29·97	190	134
D Claygate (Hertslets)	N. C. Armitage, Esq.	5	1 0	106	..	25·58	186	123
D Esher (Halidon)	D. H. Baird, Esq., C.B.E.	5	1 5	114	..	25·42	172	125
D Sutton (Waterworks)	W.Vaux Graham, Esq.,C.E.	5	1 6	166	26·0	29·18	167	138
D Sutton (Sewage Works)	W. H. Grieves, Esq., C.E.	8	1 0	94	28·8	29·75	150	119
D Surbiton (Worthington Road)	W. Stephens, Esq.	5	1 0	82	..	29·87	171	135
D Surbiton (Seething Wells)	Met. Water Board	5	0 10	34	24·9	26·52	157	123
D Surbiton (Effingham Road)	K. G. Willis, Esq.	5	1 1	..	..	27·31	185	127
D West Molesey (Walton Works)	Met. Water Board	5	0 6	35	23·5	24·89	157	127
D New Malden (Dunbar Road)	J. W. Harris, Esq.	5	1 0	..	..	26·73	166	128
D New Malden (Sewage Works)	R. H. Jeffes, Esq., C.E.	5	1 3	48	23·4	24·00	147	115
D Kingston (County Hall)	H. Wilson, Esq.	5	0 9	31	26·0	24·82	163	127
D Kingston Sewage Works	P. G. Lloyd, Esq.	8	1 0	25	27·9	26·30	154	121
d Kingston (Grammar School)	W. R. Warner, Esq.	5	1 0	32	..	23·42	..	..
D Merton (Joseph Hood Rec. Gd.)	The Engineer	5	1 0	48	..	25·39	170	120
D Raynes Park (C. School)	C. V. Manley, Esq.	5	1 0	50	..	26·08	165	121
D Raynes Park (Cottenham Pk P.S.)	J.Bowen, Esq., C.E.	5	1 2	50	24·9	26·67	150	116
D Raynes Park (Richmond Road)	W. B. de Winton, Esq.	5	1 1	70	..	27·77	183	136
D Wimbledon (Worple Road)	N. Lang Smith, Esq.	5	1 0	75	..	26·78	176	122
D Richmond (The Terrace)	G. Humpfreys, Esq.	8	0 6	109	24·9	25·85	182	130
D Richmond (Kew Observatory) (+A)	The Meteorological Office	8	1 0	18	23·8	25·11	173	123
D Mortlake (Hammersmith Cem.)	R. J. Brown, Esq.	5	1 0	23	..	23·37	174	130
D Kew (Royal Botanic Gardens)	The Director	8	0 9	20	..	26·44	166	122
D Barnes (Barn Elms)	Met. Water Board	5	1 0	16	..	23·41	152	124
6.—THAMES—Wey. 236 sq. mi.								
D Haslemere (U.D.C. Depot)	A. G. Whitcher, Esq.	5	1 0	475	36·2	41·57	177	139
D Haslemere (Frensham Hall Gdns.)	H. Windibank, Esq.	5	2 0	750	..	41·65	191	154
D Haslemere (Frensham Hall Farm)	H. Windibank, Esq.	5	1 0	600	37·4	39·36	191	154
D Haslemere (Hazelhurst)	Mrs. T. P. Newman	5	1 0	550	39·5	42·62	190	152
D Haslemere (Littledale)	F. Harrison, Esq.	5	1 0	770	..	36·73	176	148
D Haslemere (Furnace Place)	F. J. Barlow, Esq.	5	1 0	300	..	39·63	167	144
D Oakwood Hill (Honeywood Ho)	The Lady Tredegar	5	1 0	280	..	32·97	194	138
D Witley (King Edward's School)	E. Townsend, Esq.	5	1 0	300	..	35·32	165	128
D Witley (King George V. Sanatm.)	Dr. J. Watt	5	1 0	305	..	35·69	166	129
Churt (Furze Hills)	C. G. O. Bond, Esq, M.A.	5	1 0	390	..	32·58	..	..

† Formerly called Leatherhead W. W.

DIVISION II.—SOUTH-EASTERN COUNTIES—(*con.*).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge: Height of Rim above Ground.	Rain-gauge: Height of Ground above Sea Level.	Average Rainfall.	1928: Rainfall.	1928: Days with ·01 in. or more.	1928: Days with ·04 in. or more.
SURREY—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
6.—THAMES—Wey—(*con.*).								
d Churt (Bron-y-dê)	Rt. Hon. D. Lloyd George.	8	1 11	..	..	32·69	183	136
Witley (Enton Hall)	Maj. Spencer F. Chichester*	5	1 9	350	..	39·14	229	..
D Hascombe Place	C. T. Musgrave, Esq.	5	1 0	390	33·5	38·32	175	138
D Cranleigh (Homefield Cottage)	W. S. Sarel, Esq., C.B.	5	1 9	180	..	33·80	184	132
D Cranleigh (Ruffold Lodge)	Dr. Blakeman	5	1 3	..	..	31·40	175	132
d Godalming (Hascombe)	Mrs. Francis Howard	5	0 6	390	..	(33·31)	(180)	(143)
Thursley (C.E. School)	H. Swallow, Esq.	5	1 0	300	..	31·38	..	..
D Ewhurst (Coneyhurst)	Col. R. J. Few, D.S.O.	8	1 0	607	33·7	38·29	176	133
D Ewhurst (The Four Winds)	Miss E. Brooke	5	1 0	809	..	36·71	179	131
d Ewhurst (Woolpits)	Mr. W. Harrison	8	1 6	600	32·8	35·99	..	..
D Frensham (Spreakley Hollow)	A. R. Crossley, Esq.	5	1 0	200	..	32·87	180	145
d Godalming (Munstead Heath)	A. M. P. Hodsoll, Esq.	5	1 0	450	..	33·19	..	125
Godalming (Greylees)	A. Ewan, Esq.*	5	0 5	150	..	31·18	..	..
Godalming (Westbrook)	T. Turner, Esq.	5	1 0	280	..	29·77	..	..
D Godalming (Charterhouse)	O. H. Latter, Esq.	5	1 0	130	29·2	29·32	185	124
Wonersh (Little Tangley)	Mrs. Kinnersley Hooper	5	1 0	200	..	32·85	..	..
D Shackleford (Hall Place)	Mr. E. Nash	8	1 2	200	..	27·16	159	121
D Peaslake (Dewdney)	Sir F. G. Ogilvie, C.B.	5	1 0	532	..	37·09	168	137
D Bramley (Wood View)†	Rev. C. J. Etty	5	1 0	135	..	34·18	169	142
Compton (Sandy Knowe Gdns)	Mrs. F. Houghton	..	..	..	..	27·85	..	..
D Shere (Manor House)	R. A. Bray, Esq.	5	1 0	330	..	33·21	199	134
D Shere (The Rectory)	Rev. Sir P.M. Bowman, Bt.	5	1 3	200	..	36·13	169	135
D Albury (Dalton Hill Gardens)	Mr. J. Tidy	5	1 0	250	..	33·07	157	128
D Abinger Hall	Lord Farrer	8	0 10	360	36·5	37·48	200	148
Shalford (Clonkeen)	G. H. Pentland, Esq.*	..	..	110	..	28·03	..	..
D Farnham (Crooksbury Ridges)	F. R. Walters, Esq., M.D.	5	1 4	440	31·0	31·78	224	143
D Farnham (Short Heath Lodge)	Col. G. Chrystie	5	1 0	365	30·1	32·11	189	140
D Farnham (Bourne Corner)	Miss I. M Deedes	5	1 0	365	..	33·70	181	144
D Puttenham (Berthorpe)	Capt. E. H. Tuckwell, M.C.	5	1 0	350	..	29·75	171	116
D Guildford (Pilgrim Wood)	H. A. Powell, Esq., M.D.	5	1 0	320	..	31·13	171	125
D Guildford (Briarfield)	Miss L. B. Swaine	5	1 0	300	29·7	30·07	189	120
D Guildford (West Mount)	C. M. Powell, Esq.	5	1 0	220	..	31·34	170	131
D Guildford (Roy. Gram School)	H. N. Weller, Esq., M. A.	5	1 0	200	..	31·49	162	128
d Guildford (Kilvington)	Miss Meynell.	5	1 0	300	..	30·90	..	..
D Guildford (Cross Lanes)	F. F. Smallpiece, Esq.	5	1 0	200	28·6	31·26	178	134
Guildford (Abbotswood)	Elliott Kitchener, Esq.*	..	..	150	..	29·26	..	..
d Merrow (Stoodwell)	S. Eustace, Esq.	5	0 8	221	..	31·15	..	132
D West Clandon	W. Fidkin, Esq., C.E.	8	1 0	319	..	33·66	175	135
D E. Horsley (Rowbarns Grange)	Late D. W. Sissons, Esq.	5	1 0	335	..	33·90	165	137
D Worplesdon (Openwood)	D. H. Welch, Esq.	5	0 8	160	..	28·43	153	130
D Worplesdon (Golf Club)	R. Goring Thomas, Esq.	5	1 6	168	..	28·76	175	136
D Sutton Green (Pyle Hill)	Capt. S. Price-Williams	5	1 6	140	..	27·46	161	131
D Ripley (Ripley Court)	Captain C. M. H. Pearce	5	1 5	86	..	28·80	166	138
Ockham (Ockham School)	H. Titmous, Esq.*	5	2 0	100	..	26·85	..	..
D Woking (The Grange)	Miss M. E. Wilson	5	1 0	78	26·1	31·55	190	147
D Woking (Hook Heath)	W. S. Patterson, Esq.	5	1 0	160	..	27·69	156	128
Woking (Northwood)	G. T. E. Hamilton, Esq.	5	1 0	114	..	26·49	..	..
D East Clandon (Hatchlands)	F. A. Akers, Esq.	5	1 0	300	..	33·12	183	136
D Woking (The Green)	Mrs. G. E. Howlett	5	0 9	122	..	27·57	171	140
D Wisley (R.H.S. Gardens)	W. D. Cartwright, Esq.	8	1 0	150	24·1	28·35	192	136
D Byfleet (West Hall Gardens)	Mr. G. Carpenter	5	1 0	61	..	27·53	155	132
D West Byfleet (Kilmeena)	F. Littleboy, Esq.	5	1 0	100	..	27·80	159	134
D West Byfleet (Starcross)	Walter W. Way, Esq.	5	1 6	110	..	27·51	159	128
d West Byfleet (Scotland Bridge)	Capt. H. Beeney	5	1 6	69	..	29·48	..	120
D Weybridge (St. Michael's)	H. I. Bond, Esq.	5	1 0	115	..	27·37	184	133
D Weybridge (Heath Field)	Miss A. T. Gardiner	5	1 0	100	26·5	27·51	161	131
D Weybridge (West Oaks)	A. Whittet, Esq.	5	1 0	36	24·1	25·23	166	128

† Formerly called Bramley (The Limes).

* Per "Surrey Advertiser."

DIVISION II.—SOUTH-EASTERN COUNTIES—(*con.*).

	STATIONS.	AUTHORITIES.	Rain-gauge Diam.	Height of Rim above Ground.	Height of Ground above Sea Level.	Average Rainfall.	1928 Rainfall.	Days with ·01 in. or more.	Days with ·04 in. or more.
	SURREY—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
	7.—THAMES—Bourne. 55 sq. mi.								
d	Bisley (Danesmere)	H. Ingham, Esq., M.A.	5	1 6	125	..	25·41	..	122
D	Knap Hill (Ulundi)	G. C. H. Simmonds, Esq.	5	1 0	181	..	27·12	170	130
	Knap Hill (Lynbrook)	Charles Wigan, Esq.	5	1 0	200	..	26·62	182	138
D	Chobham (Sandpit Hall)	K. H. Power, Esq.	5	1 0	100	26·7	27·31	162	137
D	Chobham (West End)	F. A. Walter, Esq.	5	1 0	150	..	27·25	189	150
	Bagshot (Charlton)	W. Perry, Esq.*	..	..	..	..	26·36	..	..
D	Bagshot	G. D. Waterer, Esq.	5	..	265	..	26·16	159	130
	Windlesham (Sunderland Ho.)	O. H. Bradnack, Esq.	4	0 9	300	..	26·84	..	136
D	Chertsey (Ottershaw)	Mrs. R. H. Otter	5	1 0	200	27·1	27·37	196	141
D	Chertsey (Botleys Park)	Mr. H. Whitmarsh	5	1 5	111	..	26·13	161	139
D	Upper Childown (Long Cross H.)	Miss C.M.Leycester-Penrhyn	5	1 0	200	..	27·28	180	141
d	Sunningdale (Hilltop)	E. F. Cecil, Esq.	5	1 0	280	..	25·78	..	128
D	Chertsey (Abbey Meads)	W. Fidkin, Esq., C.E.	8	1 0	53	..	26·16	162	132
D	Virginia Water (S. Ann's Heath)	Rev. J. Peck, M.A.	8	1 1	120	25·4	24·96	160	128
d	Staines (St. Ann's Cottage)	Miss D. M. Gundry	5	1 0	52	..	(24·90)	..	..
	8.—THAMES—Loddon. 17 sq. mi.								
D	Frimley Green Waterworks	S. G. Weller, Esq.	5	0 7	220	24·6	26·58	166	132
D	Frimley Green (Ridgemount)	C. C. Haviland, Esq.	5	0 9	350	29·1	28·39	204	137
D	Camberley (Way's End)	E. Ernest Green, Esq.	5	0 11	295	..	26·03	166	134
D	Camberley (Cordwalles)	C. H. Ledward, Esq.	5	1 0	400	..	26·43	173	133
	KENT. (Area, 1,532 sq. mi.)								
	1.—ROTHER & C. 217 sq. mi.								
D	Dungeness	The Meteorological Office.	8	0 11	20	24·4	30·88	168	129
D	Lydd (The Paddock)	Dr. J. A. Proctor	5	1 0	10	..	32·79	193	139
d	Lydd (Westbroke House)	A. G. Finn, Esq., J.P.	5	1 0	10	..	30·30	..	121
D	Brookland (Thrift Farm)	C. Clark, Esq.	12	3 0	11	..	31·68	163	131
D	Dymchurch (Grove House)	R. S. Jones, Esq.	5	1 0	8	..	27·76	182	128
d	Dymchurch (Hoornes)	Mrs. Paddock	5	1 0	9	..	29·12	..	..
D	Appledore (The Well House)	Dr. F. W. Cock	5	0 11	23	..	30·58	161	130
D	Hawkhurst (Hensill)	Major F. Ross Thomson	5	3 0	180	30·5	32·62	181	138
D	Kenardington (The Firs)	Cmdr. F. H. Lyon, D.S.O.	5	1 2	65	..	27·32	168	125
D	Tenterden (Ashenden)	Major Herbert Neve	5	1 0	190	..	30·82	180	141
D	Benenden (National Sanat'm)	H. Spurrier, Esq., M.B.	5	1 0	250	..	32·28	183	153
D	Hythe	M. J. Harvey, Esq., C.E.	5	0 9	12	28·0	31·60	179	141
D	Hythe (Douglas Avenue)	W. H. Elder, Esq.	5	1 0	18	..	32·79	182	147
D	Hythe (Sandling Park)	Rt. Hon. L. Hardy	8	1 0	260	30·4	34·90	180	152
D	Sandgate	J. A. Woodgate Esq., C.E.	5	4 3	60	..	31·67	187	131
D	Saltwood (Cylinder)	Mrs. Chetwynd-Stapylton.	..	..	..	..	31·50	211	130
D	Folkestone (Borough Sanat'm)	A. E. Nichols, Esq., C.E.	5	1 0	101	28·6	33·48	176	136
D	Folkestone (Cheriton Road)	B. J. Duncan Walker, Esq.	5	1 0	160	28·8	33·21	170	137
D	Folkestone (Cherry Gardens)	H. T. Turner, Esq., C.E.	5	1 6	230	29·1	35·61	192	146
D	Capel (Lower Standen)	H. T Turner, Esq., C.E.	5	2 11	250	31·2	36·63	190	149
D	Dover (Waterloo Crescent)	W. B. Smith, Esq., C.E.	8	1 0	22	..	34·99	171	144
D	Dover (Waterworks)	W. B. Smith, Esq., C.E.	5	1 6	200	30·0	37·42	161	139
D	Dover (Buckland)	Guy Mannering, Esq.	8	1 6	50	..	40·94	171	142
D	Dover (Barton Road)	Cyril G. W. Lewis, Esq.	5	1 0	55	..	40·31	189	149
D	Kearsney (Chilton Farm)	W. B. Smith, Esq., C.E.	5	1 6	127	33·5	42·23	185	148
	2.—STOUR & C. 386 sq. mi.								
D	Lympne Aerodrome (+A)	The Meteorological Office.	8	1 0	347	28·5	31·47	188	142
D	Sellindge (Council School)	S. H. Serpell, Esq.	5	1 0	200	..	35·38	178	136
D	Smeeth School	W. H. Wetherell, Esq.	5	1 0	300	..	34·58	191	147
D	Lyminge (Elham Valley W.W.)	Phillip Harris, Esq.	5	1 6	445	..	37·95	199	153
D	Ashford	B. H. Headley, Esq.	5	1 0	190	..	32·42	186	137
D	Ashford (Albert Road)	A. E. Brounger, Esq.	5	1 0	185	..	31·14	196	142
d	Elham (Bladbean Farm)	Capt. T. L. Wall	5	0 9	459	..	(40·37)	..	..

* Per "Surrey Advertiser."

DIVISION II.—SOUTH-EASTERN COUNTIES—(*con.*)

STATIONS.	AUTHORITIES.	Rain-gauge Diam.	Height of Rim above Ground.	Height of Ground above Sea Level.	Average Rainfall.	1928 Rainfall.	Days with .01 in. or more.	Days with .04 in. or more.
KENT—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
2.—STOUR & C.—(*con.*).								
D Dover (Martin Mill Pump. Stat.)	F. L. Ball, Esq.	5	1 0	287	..	40·62	174	147
d Elham (Domel)	J. Hill, Esq.	5	1 0	459	..	39·61	..	..
D Wye (Agricultural College)	Capt. A. H. Bird	5	1 0	164	..	30·92	184	142
D Waldershare Rectory	Rev. H. Saumarez Smith	5	1 0	275	..	38·52	177	143
D Waldershare Park Gardens	J. Haggett, Esq.	8	1 0	250	33·2	37·16	166	142
D Shepherdswell (Upton Lodge)	Rutley Mowll, Esq.	5	1 0	300	..	38·30	182	146
D Shepherdswell (Montbeliard)	F. H. Bernard, Esq.	5	1 0	350	..	35·94	169	140
D Boughton Aluph (Fairlawn)	E. Simmons, Esq.	5	1 3	220	..	31·65	193	144
D Charing Pumping Station	F. L. Ball, Esq.	5	1 0	295	..	33·28	188	151
D Deal and Walmer W.W.	A. Mantle, Esq.	5	1 0	110	28·0	34·00	174	141
D Barham Pumping Station	F. L. Ball, Esq.	5	..	173	..	31·74	178	139
D Deal (Wellington Road)	Town Clerk	5	1 0	25	..	33·45	165	143
D Sandwich (Upton House, Word)	Capt. W. Elwin Napier	5	1 0	32	27·7	32·71	167	124
D Worth (Felder Lodge)	J. S. Campbell, Esq.	5	0 10	26	..	28·50	169	150
d Chilham (Lower Ensden)	F. Ivo Neame, Esq.	5	3 0	305	..	29·22	..	129
D Wingham (Margate W.W.)	Mr. J. H. Parker	5	1 0	138	28·7	30·80	174	138
D Canterbury (Medical Hall)	A. Lander, Esq.	5	1 0	39	..	28·73	163	132
D Canterbury (London Road)	Miss B. Spillett	5	1 0	66	28·7	29·80	182	138
D Canterbury (Irrigation Works)	C. Terry, Esq., C.E.	5	2 6	15	27·5	30·91	192	145
D Canterbury (Rough Common)	A. W. Wood, Esq.	5	1 0	285	..	30·15	146	140
D Ramsgate (East Cliff)	Borough Engineer	8	1 0	168	24·0	28·31	174	120
D Ramsgate (Archer House)	Miss E. F. Baker	5	1 0	75	..	29·26	162	125
D Reculver	Allington Collard, Esq.	5	5 2	27	21·8	23·46	161	123
D Broadstairs (Domus)	Capt. W. B. Marling	8	1 0	60	..	30·37	155	128
D Broadstairs (Collis Court Road)	A. Watkins, Esq.	5	1 0	120	..	29·66	172	128
D St. Peter's (Hildersham House)	H. Hurd, Esq., C.E.	5	0 9	140	23·7	31·24	149	125
d Birchington (Hollydene)	W. Tomlin, Esq., Junr.	5	6 0	75	..	26·89	..	..
D Margate (Cliftonville)	J. E. Turner, Esq.	5	1 0	51	22·8	24·24	155	119
3.—SWALE & C. 167 sq. mi.								
D Selling (Grove House)	F. Ivo Neame, Esq	5	1 5	330	..	30·65	165	132
D Selling (Luton)	F. Ivo Neame, Esq.	5	4 9	263	30·4	29·91	168	140
D Sittingbourne (Torry Hill)	D. Leigh Pemberton, Esq.	5	1 0	490	..	34·90	191	147
D Ospringe (Queen Court)	L. H. Finn, Esq.	8	1 3	50	27·2	34·19	159	138
D Faversham (Portway)	C. Gordon Neame, Esq.	5	3 0	180	..	29·66	179	142
Teynham (Norton Court)	A. L. Mercer, Esq.	5	1 6	90	..	30·23	..	..
D Teynham (New Gardens)	Mrs. Honeyball	5	1 5	30	24·5	25·62	185	129
d Graveney Marshes	L. H. Finn, Esq.	8	1 0	30	..	23·00	..	109
D Milton Regis (Sewage Works)	The Surveyor	5	1 1	19	..	26·91	165	137
Herne Bay (Waterworks)	J. Roberts, Esq.	5	1 6	130	22·8	23·77	..	..
d Sheppey (Eastchurch Parsonage)	H. C. Warren, Esq.	5	1 0	100	22·9	25·29	..	..
D Sheerness	Dr. W. C. D. Hills	5	1 0	13	..	21·06	163	104
4.—MEDWAY. 506 sq. mi.								
D Bedgebury Park Gardens	Mr. H. Arnold	5	1 0	280	..	34·48	155	134
D Woodchurch (Hengherst)	W. Mitchell, Esq.	5	1 0	152	..	29·22	171	143
D Kilndown School	J. A. Ager, Esq.	5	1 6	365	..	32·15	157	131
D Scotney Castle	E. W. Hussey, Esq.	5	3 9	203	26·8	31·15	168	131
d High Halden (Middle Quarter)	B. H. Budding, Esq.	5	1 0	114	..	28·74	..	..
D Goudhurst (Gore Court)	J. A. Druce, Esq.	5	1 0	..	30·3	32·60	150	138
D Tunbridge Wells (Hawkenbury)	D. W. Horner, Esq.	5	1 6	435	..	35·13	184	144
D Tunbridge Wells (Calverley Park)	Dr. F. C. Linton	5	1 0	355	27·0	33·88	175	136
D Tun. Wells (The White House)	Miss Monica G. Robins	5	1 6	350	..	37·04	188	160
D Speldhurst Rectory	Rev. Canon H. Masters	5	0 10	334	..	33·35	187	143
d Speldhurst (Little Court)	P. L. Rooper, Esq.	8	1 3	350	..	(35·01)	..	..
D Pembury (The Spring)	Miss L. M. Fowler	5	1 0	416	..	39·02	185	161
D Pembury Waterworks	W. H. Maxwell, Esq., C.E.	8	1 8	197	..	33·52	172	132
Southborough (Tentergarth)	Miss E. Powell	5	0 11	421	..	36·08	..	..
D Edenbridge (Falconhurst)	Hon. Mr. Justice Talbot	5	1 6	375	30·7	35·04	190	155

DIVISION II.—SOUTH-EASTERN COUNTIES—(*con.*).

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KENT—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
4.—MEDWAY—(*con.*).								
D Edenbridge (Stonewall Park)	E. G. B. Meade-Waldo, Esq.	5	1 1	344	..	32·83	176	139
D Edenbridge (Gilridge)	J. Mavrogordato, Esq.	5	1 0	400	..	35·77	203	141
d Edenbridge (Hever Castle)	Mr. William Hunter	5	1 0	200	..	31·69	..	..
D Headcorn (Summerhill)	E. M. Richford, Esq.	5	1 0	100	..	28·49	160	130
D Pluckley (Brick Works)	Guy G. Davies, Esq.	5	1 6	112	..	29·67	173	136
D Penshurst Place	Lord De L'Isle and Dudley	5	1 0	120	..	35·18	199	136
D Penshurst (Parkholt)	J. M. Sturgess, Esq.	5	0 9	265	..	30·08	174	138
D Tonbridge (Mabledon Park)	J. F. W. Deacon, Esq.	5	1 0	190	..	31·21	157	130
D Tonbridge (The Drive)	G. J. Kimmins, Esq.	5	0 10	165	..	32·87	180	141
D Tonbridge (Lyons)	Dr. E. S. Cardell	5	1 0	75	..	29·80	186	140
D Hildenborough (Gailes)	E. E. Roper, Esq.	5	1 0	159	..	29·07	179	138
D Hildenborough (Hollanden Ho.)	C. H. Scott, Esq.	8	1 0	99	..	29·92	202	139
D Langley (Rumwood Court)	Mr. W. J. Gould	5	1 9	354	..	32·09	182	143
d Harrietsham (Dun Akyune)	C. Mackinnon, Esq.	5	1 4	400	..	32·32	..	..
D Nettlestead (Old Quarry)	W. Pye-English, Esq.	5	1 6	286	..	29·76	184	142
D Otham (Synyards)	Ambrose Boyson, Esq.	5	1 0	315	..	32·62	199	149
D Sevenoaks (River Hill)	Lt.-Col. J. M. Rogers, D.S.O.	8	2 6	520	27·1	31·48	173	149
D Hollingbourne (Penn Court)	S. Lucy, Esq.	5	1 1	261	..	33·65	203	147
D Maidstone (W. W., Barming)	C. H. Harden, Esq., C.E.	5	1 6	250	..	29·54	171	136
D Maidstone (Brenchley Gardens)	T. F. Bunting, Esq., C.E.	5	0 9	50	..	30·29	173	139
D Maidstone (Mill Street)	T. F. Bunting, Esq., C.E.	8	6 0	38	..	29·79	184	141
D Aylesford (Forstal)	C. H. Harden, Esq., C.E.	5	1 4	20	..	28·16	177	135
D East Malling (Blacklands)	Major C. E. Tristram	5	1 0	80	..	28·08	158	132
D East Malling (Research Station)	The Secretary	8	1 0	132	..	28·39	175	133
Maidstone (Allington Lock)	Mr. W. Smith	5	1 0	20	..	28·83	..	140
D Detling (The Croft) *New*	R. Cooke, Esq.	5	1 0	330	27·8	34·32	210	154
M Detling (Pollhill Fields)	R. Cooke, Esq.	5	1 0	553	..	31·38	..	..
D Chatham (Woolmans Wood)	W. Coles Finch, Esq.	5	3 0	470	..	32·05	183	141
D Halling Pumping Station	F. L. Ball, Esq.	5	1 0	75	..	31·29	161	141
D Chatham (Luton W.W.)	W. Coles Finch, Esq.	5	3 0	88	..	28·48	166	132
D Rochester (Deanery Gate)	Warwick Stunt, Esq.	5	1 0	50	..	26·26	174	119
D Rochester (Knight's Place)	Miss F. H. Pye	5	3 0	320	26·0	30·31	181	146
D Strood Waterworks	W. Law, Esq., C.E.	5	1 0	112	..	27·29	176	127
5.—THAMES—Darent & C. 256 sq. mi.								
D Westerham Town	Met. Water Board	5	1 0	380	..	36·67	192	155
D Westerham Hill Pumping Stat.	Met. Water Board	5	1 0	539	..	36·27	209	154
D Sundridge Rectory	Rev. C. C. Gosselin	5	1 0	280	..	34·00	189	145
M Sevenoaks (Tonbridge Rd.Res.)	A. Grainger, Esq.	5	1 6	556	..	33·72	..	..
D Sevenoaks (Speldhurst Close)	Mrs. D. Mackinnon	5	1 0	470	..	33·84	183	148
D Sevenoaks (Knole Park)	E. Stubbs, Esq.	5	1 1	500	..	35·06	162	143
D Tatsfield (Betsoms Hill)	Met. Water Board	5	0 7	820	..	38·96	204	158
M Seal (St. Lawrence Reservoir)	A. Grainger, Esq.	8	1 0	665	..	33·27	..	..
M Seal (Kemsing Pumping Stat.)	A. Grainger, Esq.	5	1 0	292	..	32·45	..	..
D Sevenoaks (Chevening Gardens)	Mr. J. C. Sutton	5	1 0	360	..	36·74	174	142
D Knockholt (Kent Waterworks)	Met. Water Board	5	1 0	785	29·9	36·23	171	151
D Biggin Hill (Aerodrome)	The Meteorological Office.	8	1 0	597	..	37·45	200	150
D Fairseat (Fairseat House)	Col. W. Pitt, C.M.G.	5	1 0	670	..	36·36	189	161
D Chelsfield (Hewitts)	W. A. Waring, Esq.	5	4 0	476	..	31·58	184	137
Keston (Forest Lodge)	W. H. Dodgson. Esq.	5	0 6	450	..	33·53	..	..
D W. Wickham (Wickham Court)	Sir Stephen Lennard, Bt.	5	1 0	300	..	30·65	155	133
D Eynsford Hill	Arthur Mee, Esq.	5	1 0	358	..	30·74	197	141
D Orpington (Kent Waterworks)	Met. Water Board	5	1 0	220	..	29·48	175	134
d Crockenhill (Wested Farm)	A. T. Miller, Esq.	5	1 6	331	..	28·78	..	..
D Bickley (Farrants)	Miss Chalmers	5	1 0	250	..	28·83	168	130
Bromley (High Street)	Dr. H. Wynne Thomas	5	1 0	200	..	27·35	..	..

DIVISION II.—SOUTH-EASTERN COUNTIES—(*con.*).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge: Height of Rim above Ground.	Rain-gauge: Height of Ground above Sea Level.	Average Rainfall.	1928: Rainfall.	1928: Days with ·01 in. or more.	1928: Days with ·04 in. or more.
KENT—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
5.—THAMES—Darent & C.—(*con.*).								
D Bromley	The Borough Engineer	5	1 0	213	..	26·38	177	125
D Bromley (Plaistow Lane)	Col.E.Satterthwaite,C.B.,V.D.	5	0 9	234	25·9	29·26	194	145
D Beckenham (Croydon Road)	The Surveyor	8	1 0	110	..	30·95	183	136
D Penge (Recreation Ground)	H. W. Longdin, Esq., C.E.	5	1 1	122	25·2	28·64	162	129
d Anerley (Oakfield Road)	Miss S. Stannard	5	1 5	..	..	24·41	..	113
D Chislehurst (Hawkwood)	Miss M. C. Edlmann	5	1 0	300	..	26·14	194	135
Chislehurst (Holbrook Lane)	W. P. Jones, Esq.	5	1 0	325	..	27·55	..	..
D Chislehurst (Scadbury Park)	Mr. B. Orchard	5	1 0	250	..	26·13	174	130
D Swanley (Horticultural College)	Miss H. G. Mitchell	5	1 0	155	..	25·46	176	122
D Southfleet (Kent Waterworks)	Met. Water Board	5	1 0	82	..	25·79	187	132
D Wilmington (Kent Waterworks)	Met. Water Board	5	1 0	25	..	24·19	164	124
d Dartford (West Hill)	Mr. J. Taylor	5	1 3	100	..	26·82	161	121
D Dartford (Tower Road)	C. O. Hunt, Esq.	5	0 6	125	..	24·86	189	131
D Stone (City of Lond.Ment.Hsp.)	J. Gower, Esq.	5	1 0	200	..	23·71	163	117
D Higham Waterworks	C. H. Clark, Esq.	8	1 0	141	..	27·67	192	129
D Erith (Crossness)	London County Council	14	0 6	16	..	23·12	170	121
SUSSEX. (Area, 1458 sq. mi.)								
1.—LAVANT & C. 175 sq. mi.								
D Selsey (Large Acres). *Field*	E. Heron Allen, Esq.,F.R.S.	5	1 0	21	..	34·87	194	137
D Bognor (Waterloo Square)	The Town Clerk	8	1 0	20	25·9	34·87	175	136
D Bognor (Albert Road)	W. L. Guermonprez, Esq.	8	1 0	17	..	32·91	181	131
d Chichester (Itchenor House)	Capt. A. E. Russell	5	0 10	25	..	(34·65)	..	..
D North Mundham Vicarage	J. Outram, Esq.	5	0 9	..	..	36·50	183	128
D Colworth (Manor Farm)	Harold W. Drewitt, Esq.	5	4 6	18	27·7	33·13	161	127
D Merston (Abelands)	Miss V. Kennard	5	0 6	24	..	32·55	163	123
D Bosham (Cobnor)	Major S. W. P. Beale	5	1 6	12	..	33·46	184	115
d Yapton (Bonhams)	Miss M. E. Rowe	5	1 0	24	27·7	30·98	..	..
D Barnham (Downview Road)	P. A. Bisset, Esq.	5	1 0	20	..	36·13	180	136
D Chichester (Kingsham Farm) (R)	W. Lawson, Esq.	8	0 10	35	..	35·83	195	134
D Chichester (Westgate)	G. Ashley Tyacke, Esq.	8	1 0	40	28·7	34·22	180	129
D Chichester (West Street)	Dr. Walter Dick	5	1 0	40	..	32·15	157	121
d Chichester (County Hall)	Stanley Morris, Esq.	5	1 0	45	..	34·59	..	..
d Chichester (Oakwood House)	Mrs. Baring Du Pré	5	1 0	101	..	35·85	..	132
D Chichester (West Broyle Gdns.)	Mrs. Weller-Poley	5	1 4	107	..	35·74	156	138
D Emsworth (West Bourne)	Rev. L. B. Birkett	5	1 0	30	30.9	35·54	194	142
D Funtington House	J. A. Greenwood, Esq	5	1 0	95	..	36·55	168	136
d West Stoke Rectory	Rev. Preb. W. F. Shaw	5	1 0	176	..	36·32	..	130
D Chichester (Goodwood Gardens)	Duke of Richmond &Gordon	5	1 3	133	..	38·04	191	142
D Emsworth (Stansted Park)	Mr. T. E. Tomalin	5	2 6	140	..	43·05	207	150
D Emsworth (Watergate House)	W. M. Christy, Esq.	5	1 0	222	..	42·55	187	140
D West Dean Park	Mr. W. H. Smith	5	1 0	190	..	44·22	161	145
D Chilgrove House	E. L. Woods, Esq.	5	1 6	266	..	44·26	164	135
D Compton (Compton House)	Miss K. B. Langdale	5	1 0	263	36·6	43·97	180	151
2.—ARUN. 285 sq. mi.								
D Littlehampton (Met. Station)	Thomas Benson, Esq.	5	1 0	27	..	31·51	161	124
d Rustington (Bracondale Nurs.)	J. Muir, Esq.	5	0 10	30	..	32·15	..	118
D Lyminster Vicarage	Rev. Dr. S. P. Duval	5	1 0	20	..	30·91	174	119
D Arundel (Cross Bush)	Miss M. Orme	5	1 3	150	..	35·56	193	133
D Patching Farm	Michael Drewitt, Esq.	5	1 0	180	30·8	37·11	155	127
Harting (Down Place)	R. G. Blackwell, Esq.	5	1 2	401	..	45·98	169	132
D Storrington Rectory	Mrs. Faithfull	5	1 1	..	..	41·55	160	138
d Pulborough (Nutbourne Manor)	H. M. Baker, Esq.	5	..	100	..	35·05	..	..
D Pulborough (Codmore Hill)	Rev. C. Ash	5	2 0	165	..	38·08	190	149

DIVISION II.—SOUTH-EASTERN COUNTIES—(*con.*).

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SUSSEX—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
2.—ARUN—(*con.*).								
D Fittleworth Rectory	Rev. A. C. Lucey	5	1 9	135	..	37·75	169	151
d Selham (Selham House)	C. C. Lacaita, Esq.	5	1 0	115	..	38·86	..	125
D Petworth Park Gardens	Lord Leconfield	5	1 0	182	..	37·63	182	134
d Tillington (River House)	Hon. Lady Cunliffe, C.B.E.	5	1 0	230	..	34·60 ?	..	120
D Tillington (Westmoor)	Mrs. Randall	5	1 0	200	..	37·42	187	153
Midhurst (Fairview)	Gilbert Eames, Esq.	5	1 0	..	..	38·58	173	135
d Billingshurst (The Nook)	Chas. F. Rilot, Esq.	5	1 0	120	..	32·59	..	..
D Kirdford (Hills Green)	L. Baker, Esq.	5	1 0	150	..	32·88	167	126
D Liss (Hill Brow)	F. W. Beckford, Esq.	5	1 0	500	..	42·80	184	141
D Fernhurst (Ashurst)	J. G. Ohlenschlager, Esq.	5	1 0	280	..	37·95	188	136
D Fernhurst (Hill Farm)	J. King, Esq.	5	0 9	426	..	41·49	198	143
D Fernhurst (Blackdown House)	Lady Philipson Stow	5	1 0	550	..	39·51	177	145
D Lower Beeding (The Warren)	Leicester M. Reed, Esq.	5	0 10	430	..	38·11	159	138
D Horsham (Christ's Hospital)	Major Gabriel Green, M.C.	8	1 3	160	..	32·09	150	118
D Horsham (Sewage P.S.)	C. G. Atkinson, Esq.	8	1 0	188	..	33·94	169	134
D Horsham (Wimblehurst)	Miss E. M. Allcard	5	1 0	195	30·0	34·17	167	138
d Horsham (Dunedin)	A. C. Holland, Esq.	5	1 6	220	..	35·00	..	126
D Rusper (The Nunnery)	Sir Cecil J.B. Hurst, G.C.M.G.	5	1 6	260	..	35·57	166	137
3.—ADUR & C. 237 sq. mi.								
D Rottingdean School	Mr. T. A. Sandalls	5	1 0	120	..	32·98	166	127
D Rottingdean (Hillside)	Admiral H. J.L. Clarke, C.B.E.	5	1 0	60	..	32·21	155	116
D Worthing (Victoria Park)	Dr. R. H. Wilshaw	8	1 0	35	27·5	32·84	161	120
D Brighton (Old Steyne)	The Medical Officer of Health	5	1 0	32	28·1	38·10	152	136
d Hove (Park View)	Chas. Modlen, Esq.	5	0 11	145	..	(37·07)	(157)	(134)
D Brighton (Dyke Road)	R. A. Penney, Esq.	5	1 0	240	..	36·26	167	136
D Lancing College	The Headmaster	5	1 3	120	..	37·02	162	138
D Brighton W.W. (Goldstone Bot.)	A. B. Cathcart, Esq., C.E.	8	1 0	142	..	33·68	170	136
D Brighton W.W. (Lewes Road)	A. B. Cathcart, Esq., C.E.	8	3 10	140	29·9	39·92	167	139
D Brighton W.W. (Shoreham)	A. B. Cathcart, Esq., C.E.	8	1 8	12	..	36·54	174	134
D Brighton W.W. (Mile Oak)	A. B. Cathcart, Esq., C.E.	8	1 3	166	..	38·13	168	131
D Brighton W.W. (Race Hill Res.)	A. B. Cathcart, Esq., C.E.	8	1 3	469	..	41·04	168	143
D Falmer (Brighton W.W.)	A. B. Cathcart, Esq., C.E.	8	1 4	202	..	40·63	185	140
D Patcham (Brighton W.W.)	A. B. Cathcart, Esq., C.E.	5	1 1	206	..	39·91	174	146
D Bramber (Burletts)	Hatton G. Sugden, Esq.	5	1 0	75	..	44·93	200	145
D Washington Vicarage	Rev. A. H. S. Pattrick	5	1 0	251	..	42·27	179	141
D Ditchling (Neston)	J. Brown, Esq.	5	1 1	170	..	43·32	174	144
D Hassocks (Wilmington Lodge)	C. T. Agar, Esq.	5	1 0	200	..	41·47	168	148
D Hassocks (The Croft)	Harold Taylor, Esq.	5	1 0	200	..	42·44	167	138
D Keymer	J. Francis Jupp, Esq., C.E.	5	1 0	..	..	41·07	166	146
D Steyning (Ashurst Rectory)	Rev. R. P. E. Richards	5	1 0	50	..	33·65	176	144
D Burgess Hill (Donisthorpe)	A. Malden, Esq.	5	1 6	190	..	34·79	183	137
D West Grinstead (Danefold)	Miss T. Gaisford	5	1 0	130	..	(33·61)	(161)	(138)
D Cuckfield (Henmead Hall)	Mrs. Maxwell Campbell	5	3 0	365	..	37·98	174	143
D Billingshurst (Duncan's Farm)	Miss Edith Beck	5	1 0	130	..	34·82	174	143
D Slinfold (Elmhurst Farm)	Elmhurst Fmg. & Trdg. Co.	5	0 10	200	..	32·37	181	129
4.—OUSE. 224 sq. mi.								
D Seaford (Bowden House School)	J. F. Thomas, Esq.	5	1 0	190	..	33·61	158	134
D Seaford (Newlands)	T. Davys Manning, Esq.	5	1 0	100	..	34·23	157	132
D Newhaven (Poverty Bottom WW)	J. T. Bickford, Esq.	8	1 0	51	..	37·23	170	139
d Selmeston Vicarage	Rev. F. S. Morgan	5	1 0	153	..	36·30	..	..
D Lewes W. W. (Kingston)	J. T. P. Johnston, Esq.	8	1 3	13	..	45·67	205	145
D Ringmer (Park House)	G. Elliott Sealy, Esq.	5	1 0	100	..	36·97	177	143
D Barcombe (The Gables)	L. S. F. Woodhead, Esq.	8	1 0	100	..	43·02	184	148
d East Hoathly (Halland Park)	R. Shanks, Esq.	5	1 1	325	..	36·65	..	136
Framfield (High Cross)	Maj. R. L. Thornton, C.B.E.	5	1 0	195	..	35·57	..	..
D Haywards Heath (Gower Road)	Mrs. J. E. Shirley	5	3 4	242	..	31·49 ?	175	136
D Haywards H. (Paddockhall Rd.)	L. E. Hervey, Esq.	5	1 0	260	..	36·45	186	142
Buxted (Strawberry Hall)	C. Rintoul, Esq.	5	1 0	180	..	34·81	166	..

DIVISION II.—SOUTH-EASTERN COUNTIES—(*con.*).

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SUSSEX—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
4.—OUSE.—(*con.*).								
D Mayfield (Five Ashes)	Miss Emily Aston	5	1 6	300	..	33·60	185	137
D Lindfield (The Common)	R. H. Robertson, Esq.	5	1 6	250	..	35·97	169	140
D Uckfield (Fairwarp)	Col. A. E. Barchard	5	0 10	475	..	41·09	195	148
Oldlands Hall	(R) F. Eckstein, Esq.	8	3 0	400	..	43·91	179	138
d Horsted Keynes (Holy Well P.S.)	F. Martin, Esq., C.E.	8	1 9	124	..	35·43	..	133
D Ardingly (Lywood House)	G. Forrester Scott, Esq.	5	0 9	240	..	35·86	193	133
D Ardingly (Wakehurst Place)	G. W. E. Loder, Esq.	8	1 3	437	..	40·53	192	150
D Horsted Keynes (Birchgrove)	Miss G. C. Price-Davies	5	1 0	400	..	34·93	196	137
D Balcombe (Lullings)	Mrs. M. Holland	5	1 0	348	..	39·38	184	148
D Balcombe (The Gables)	Mr. G. J. Warren	8	1 3	358	..	40·90	186	153
D Balcombe (Stockcroft)	R. Newton, Esq.	5	1 1	341	..	38·24	182	144
D Balcombe (Waterworks)	F. Martin, Esq., C.E.	8	1 0	471	..	37·68	162	138
D Balcombe (Highley Manor)	Mr. B. T. Brooks	8	1 6	420	..	39·95	188	157
D West Hoathly (Stonelands)	J. Godwin King, Esq.	5	1 0	450	..	39·59	182	150
5.—CUCKMERE & O. 189 sq. ml.								
D Eastbourne (West Lodge)	Miss E. K. Beauford	5	1 2	120	..	35·99	175	141
D Eastbourne (Wilmington Sq.) (+A)	Dr. W. G. Willoughby	5	1 0	35	30·7	34·74	172	133
D Eastbourne (Motcombe Gdns) (A)	Major L. Roseveare, C.E.	11	1 7	59	..	34·58	165	131
D Eastbourne (Arundel Road)	Miss G. J. Woodd	8	1 6	86	..	36·48	183	135
D Eastbourne (Arundel Road)	J. C. Wright, Esq.	5	1 0	70	..	34·47	165	118
D Friston	A. Wilkins, Esq.	8	1 0	104	..	35·17	182	145
D Jevington	A. Wilkins, Esq.	8	1 0	274	..	37·61	180	149
D Litlington	A. Wilkins, Esq.	8	1 0	19	..	36·61	163	140
D Willingdon Sewage Farm	R. W. Fovargue, Esq.	5	1 0	24	..	37·00	153	137
D Pevensey Pumping Station	R. W. Fovargue, Esq.	5	1 0	12	..	31·96	168	128
D Pevensey Bay Pumping Station	R. W. Fovargue, Esq.	5	1 0	7	..	31·04	162	128
D Bexhill (Egerton Park)	H. J. Sargent, Esq.	8	1 0	12	..	32·11	163	125
d Bexhill (Lunsford Cross)	W. Tattersall, Esq.	8	1 0	150	..	33·10	..	..
D St. Leonards (Gensing Gardens)	W. Ruskin Butterfield, Esq.	8	1 0	178	28·4	38·09	208	149
d St. Leonards (Thorndene)	Miss Agnes E. Tait	5	1 0	190	..	36·22	175	131
D Hailsham (North Street)	R. Matthews, Esq.	5	1 0	105	..	35·76	187	139
d Hurstmonceaux Place	H. A. James, Esq.	5	1 1	83	..	31·42 ?	..	118
D Hailsham (Magham Down)	E. M. Bear, Esq.	5	1 0	90	..	32·66	163	129
D Hastings (Newgate)	(R) S. Little, Esq., C.E.	8	5 6	240	..	35·56	166	129
D Hastings (Halton Reservoir)	S. Little, Esq., C.E.	5	1 0	300	..	37·25	168	137
D Hastings (Fairlight Reservoir)	S. Little, Esq., C.E.	5	1 0	523	..	36·57	160	137
D Ninfield (Hazard'sGrnPmp.St.)	(R) E. Pollard, Esq.	8	0 10	74	..	29·12	194	125
d Battle (Forewood W.W.)	S. Little, Esq., C.E.	5	1 0	46	..	34·03	169	125
D Battle (Campfield)	Lt.-Col. G. A. Yool, D.S.O.	5	1 0	179	..	34·85	179	141
D Hellingly (Burlow)	G. Berry Hamlin, Esq.	5	1 0	209	..	35·87	192	137
D Horeham Road (Coxlow)	Miss P. C. Harrison	5	1 0	260	32·2	34·91	187	139
D Horeham Rd. (Hollycroft Cott.)	J. Hamlin, Esq.	5	1 0	300	..	37·73	185	145
D Horeham Road (Holmwood)	Rev. G. T. Maw	5	1 0	380	..	36·77	159	134
D Heathfield (The White Cottage)	J. F. Leigh Clare, Esq.	5	1 0	500	..	34·57	180	140
6.—ROTHER. 194 sq. ml.								
D Westfield Vicarage	Rev. E. J. Morgan	5	5 6	101	..	(37·54)	185	134
d Brede Pumping Station	S. Little, Esq., C.E.	8	1 0	37	..	33·86	..	..
D Battle (Netherfield)	Thos. W. C. Terry, Esq.	5	1 0	420	..	37·57	185	147
D Udimore (The Wick)	Major R. P. Mair	8	1 0	92	..	34·82	151	131
D Rye (The Point)	W. Gay, Esq.	5	1 0	120	..	35·87	179	149
D Rye (Fairfield House)	W. Dawes, Esq.	5	1 1	145	..	34·83	170	147
D Brightling Park	T. P. Tew, Esq.	5	1 0	545	..	41·22	187	142
Peasmarsh (The Place House)	(R) Lt.-Col. G. W. Liddell, D.S.O.	8	2 6	200	..	35·98	..	..
D Peasmarsh (Woodside)	A. W. Rickards, Esq.	5	0 8	100	..	35·09	183	159
D Beckley (Little Harmers)	B. E. de N. Ramus, Esq.	5	1 0	160	..	38·66	220	153
D Heathfield (TottingworthPark)	Mr. J. Masson	5	1 0	500	..	42·62	168	135
D Northiam (Great Dixter)	N. Lloyd, Esq., O.B.E.	8	1 0	209	..	33·98	166	139
D Ticehurst (Stonegate)	W. J. Wheeler, Esq.	5	1 0	230	..	38·94	202	144

DIVISION II.—SOUTH-EASTERN COUNTIES—(*con.*).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge Height of Rim above Ground.	Rain-gauge Height of Ground above Sea Level.	Average Rainfall.	1928 Rainfall.	1928 Days with .01 in. or more.	1928 Days with .04 in. or more.
SUSSEX—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
7.—MEDWAY. 117 sq. ml.								
D Rotherfield (Horsegrove Fm.)	F. W. Shaw, Esq.	5	1 0	528	..	41·49	176	146
D Crowborough (Tudor Lodge)	F. Holroyd, Esq.	5	1 0	620	..	43·22	194	144
D Crowborough (Jarvis Brook)	Crowborough Water Co.	5	1 0	325	..	42·09	163	141
D Crowborough (Uckfield Lodge)	Mrs. A. M. Driberg	8	1 0	796	36·0	44·32	165	146
D Crowborough (The Manse)	Rev. F. J. Briggs	5	1 0	730	..	45·96	183	144
d Crowborough (Te Whare)	Miss B. Hames	5	1 0	796	..	43·69	224	142
D Wadhurst (Lower Cousley Wd)	F. Wilkin, Esq.	5	1 0	416	..	32·80	179	138
d Forest Row (Wych Cross Place)	D.W.Freshfield,Esq.,D.C.L.	5	1 0	600	..	40·48	..	144
D Forest Row (Hindleap Lodge)	Mr. A. Adam	5	1 6	620	..	40·64	171	132
D Forest Row(Coleman's Hatch Vic)	Rev. H. C. B. Foyster	5	1 2	300	..	38·57	222	147
Forest Row (Charlwood Farm)	A. Hoare, Esq.	5	2 0	350	..	41·04	160	..
D E. Grinstead (Brambletye)	Major G. Larnach-Nevill	5	1 0	420	..	39·58	164	144
D Frant (Hazelhurst)	J. H. A. Love, Esq.	5	1 3	450	..	36·84	183	139
D Frant (Henley House)	Rev. E. Malden	5	1 6	440	32·3	38·58	193	146
d Frant (Eridge Castle)	Mr. A. Wilson	5	1 0	400	..	38·06	..	151
d Frant (Highfield)	H. S. Eeles, Esq.	5	1 0	413	..	35·94	..	..
D Groombridge (Crossways)	Capt. D. P. A. Gray	5	0 11	260	..	36·25	193	142
D Hartfield (Bolebroke)	Percy Mann, Esq.	5	0 11	150	..	36·44	162	138
D Tunbridge Wells (Frant Road)	A. G. Robins, Esq.	5	1 0	430	..	40·09	187	147
D Crawley Down (The Grange)	T. H. W. Buckley, Esq.	5	0 9	430	..	38·73	180	144
D E. Grinstead (Brockhurst Obsy)	W. S. Franks, Esq.	8	1 0	435	32·9	39·57	221	159
D Wadhurst (Downgate)	Rev. E. P. Gatty	5	1 6	300	..	38·93	170	143
8.—THAMES—Mole. 27 sq. ml.								
D Turners Hill (Hill House)	Miss R. M. Ravenshaw	8	1 6	477	..	41·03	178	154
D Worth (Worth Lodge)	C. W. Nix, Esq.	5	1 0	340	31·9	36·96	201	140
d Crawley (The Beeches)	N. Longley, Esq.	8	1 0	220	..	37·64	..	142
9.—THAMES—Wey. 10 sq. mi.								
D Milland House	S. Thompson, Esq.	5	1 0	425	..	36·28	178	145
D Liphook (Ripsley)	W. D. Bosanquet, Esq.	5	1 0	400	..	38·43	180	148
HAMPSHIRE. (Area 1,622 sq. mi.)								
1.—ISLE OF WIGHT. 150 sq. ml.								
D St. Catherine's Point	The Chief Officer	c	0 8	..	..	37·45	161	129
D Blackgang (H.M. Coastguard)	Mr. H. W. Hawkes	5	1 0	420	..	40·94	162	130
D Ventnor (Flint Cottage)	J. S. Ineson, Esq.	5	1 0	99	..	38·39	166	129
D Ventnor (Royal National Hos.)	Miss N. G. Abercrombie	5	1 0	59	28·9	39·93	176	133
D Ventnor (Public Park)	Ventnor U.D.C.	5	1 0	196	..	36·25	166	131
D Ventnor (Fern Bank)	A. W. Jolliffe, Esq.	5	1 5	250	..	40·48	172	141
D Godshill (Daffodil Valley Farm)	S. F. Lunniss, Esq.	5	1 0	195	..	45·44	173	145
D Shanklin (Pomona Road)	The Town Surveyor	8	1 0	199	..	45·43	175	141
d Brighstone Rectory	Rev. E. W. Silver	5	1 0	140	..	40·41	..	128
d Brighstone (Pitt Place)	A. A. H. Wykeham, Esq.	5	1 7	200	..	34·63 ?	..	124
D Sandown	The Surveyor	8	1 0	13	..	38·78	219	143
D The Needles (Golf Club)	Mrs. G. E. Newnham	5	1 0	300	..	30·96	172	126
D Totland Bay (Aston House)	J. Dover, Esq.	8	1 0	140	28·5	33·57	167	126
D Freshwater (Pumping Station)	J. Dover, Esq.	8	1 0	10	..	34·31	180	131
D Newport (The Mall)	J. F. Jackson, Esq.	5	1 0	48	..	42·25	184	139
D Ryde (Perivale)	Major E. C. Murray	5	1 3	193	..	40·77	182	129
D Ryde (Buckland Grange)	Sir Hugh Daly	5	1 0	90	..	37·45	230	140
D Ryde (Esplanade Gardens)	B. F. Holness, Esq., C.E.	5	1 9	12	..	33·43	175	123
D Wootton (Fernhill)	Major C. G. Brodie, M.C.	8	1 0	118	..	37·97	175	127
D Wootton (Oak Lawn)	R. W. Hutton, Esq.	5	0 9	80	..	37·20	179	134
D East Cowes (Spring Hill)	Sir George Shedden	5	1 0	123	..	32·56	170	124
D Cowes W.W. (Broadfields)	J. W. Webster, Esq., C.E.	5	1 0	161	..	33·95	176	135

DIVISION II.—SOUTH-EASTERN COUNTIES—(*con.*).

STATIONS.	AUTHORITIES.	Rain-gauge Diam.	Height of Rim above Ground.	Height of Ground above Sea Level.	Average Rainfall.	1928 Rainfall.	1928 Days with ·01 in. or more.	1928 Days with ·04 in. or more.
HAMPSHIRE—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
2.—STOUR. 32 sq. mi.								
Bournemouth (Pleasure Gdns)	C. Dales, Esq.	5	1 0	10	..	29·90	175	129
D Bournemouth (East Cliff)	Dr. F. G. Penrose	8	1 0	120	..	30·69	173	128
D Bournemouth (Rodney House)	S. Hyla Greves, Esq.	5	1 0	145	..	33·25	165	124
Bournemouth (Vale View)	C. Dales, Esq.	5	1 0	145	31·5	36·24	182	133
D Bournemouth (Talbot Woods)	H. Constantine, Esq.	5	1 0	110	..	34·76	169	131
D Bournemouth (Howard Road)	E. D. Shawfield, Esq.	5	1 0	117	..	34·03	176	122
d Christchurch (Air Compressing Sta.)	Borough Surveyor	5	0 10	6	..	30·07	..	117
D Christchurch (Heron Court)	The Earl of Malmesbury	5	1 0	25	..	38·80	171	139
D Ringwood (St. Leonards)	S. O. Ferry, Esq.	5	1 0	60	..	33·45	170	134
3.—EAST AVON & C. 114 sq. mi.								
D Christchurch (Harrow Lodge)	R. C. Bacon, Esq.	8	1 0	135	..	36·47	202	141
D Ringwood (Bisterne)	Major J. D. Mills	8	1 2	45	..	36·29	195	132
D Ringwood (Ashley)	Miss M. E. Williams	5	1 0	100	..	39·55	208	146
D Ringwood (Crow Hill)	Mrs. H. F. Rawstorne	5	1 0	250	..	35·09	189	132
d Ringwood (Grey Friars)	R. W. Christy, Esq.	5	1 0	50	..	33·18	..	118
D Fordingbridge (Cuckoo Hill)	Heywood Sumner, Esq.	5	1 0	150	..	38·51	195	145
D Fritham (Fritham House)	H. H. S. Northcote, Esq.	5	1 0	399	..	38·81	187	147
Fordingbridge (Dockens)	E. W. Poore, Esq.	8	1 0	140	..	36·54	189	134
d Fordingbridge (Oaklands)	S. B. Rake, Esq.	8	1 0	135	31·7	(36·44)	(200)	(142)
4.—TEST & SOLENT. 551 sq. mi.								
D Milford-on-Sea (Salt Grass)	A. C. G. Heygate, Esq.	5	1 0	6	..	32·89	160	130
D Lymington (The Salterns)	P. A. Ouvry, Esq.	5	1 0	4	..	31·50	171	128
D Lymington (Woodmancote)	Major G. M. Harding	5	1 0	70	..	34·05	183	130
Sway (Gordleton)	W. F. Wright, Esq.	5	1 6	105	..	33·32	160	128
D Sway (Sway Wood)	J. Dixon, Esq.	5	1 0	150	..	35·56	171	135
D Boldre (Battramsley Close)	Dr. H. A. Des Voeux	5	0 7	119	..	36·65	189	135
D Brockenhurst (Setley)	Col. C. Mansel-Jones, V.C.	5	1 0	145	..	36·88	166	138
D Calshot (Seaplane Station)(+A)	The Meteorological Office	8	1 0	12	25·5	28·79	175	125
D Beaulieu (Moonhills Gate)	J. E. Hutton, Esq.	5	1 0	130	..	37·72	189	146
D Burley (Sandys)	G. Mason, Esq.	5	1 0	150	..	37·58	183	138
d Fawley (Cadland Park)	L. Smith, Esq.	8	4 6	52	..	32·46	..	..
D Lyndhurst (Deerhurst)	Ralph Paget, Esq.	5	1 6	250	..	38·35	163	140
D Lyndhurst (Allum Green)	Miss S. R. Fenwick	5	1 0	125	..	40·32	194	145
D Hythe (Dibden House)	Lt.-Col. H. W. Kettlewell	5	1 0	85	..	37·96	186	134
D Totton (Shorne Hill)	Capt. J. H. W. Rennie	5	1 0	130	..	38·02	196	147
D Southampton (East Park)	Col. E. M. Jack, R.E.	8	1 0	66	30·9	35·87	199	134
M Southampton Common Res.	E. C. Rodda, Esq., C.E.	5	1 0	193	..	33·65	..	..
D Romsey (Embley Gardens)	J. J. Crosfield, Esq.	5	1 0	130	..	34·65	190	136
D Romsey (Harefield)	Lt.-Col. W. J. Langford	5	1 0	120	..	34·09	174	145
d Melchet Court	Mr. W. Petty	5	3 6	114	..	35·80	..	..
D Romsey (Timsbury Manor)	A. R. Wilson-Wood, Esq.	..	..	..	..	32·10	161	122
D Romsey (Timsbury)	E. C. Rodda, Esq., C.E.	8	1 8	96	..	34·33	188	132
D Horsebridge (Bossington House)	Mrs. Mansell-Jones	8	0 9	98	..	36·20	165	139
d Upper Somborne (Clock Ho.)	Mr. C. Alleway	8	1 0	250	..	(34·47)	..	..
D Broughton	W. Steele Tomkins, Esq.	5	4 0	130	..	34·79	160	132
Stockbridge (Houghton Lodge)	Mr. G. Morris	5	1 0	112	..	35·33	159	141
D Crawley (Chilbolton Down)	R. Hargreaves, Esq.	8	1 2	350	..	34·80	176	134
D Micheldever (School House)	W. Geo. Gould, Esq.	5	1 0	280	..	(34·61)	199	146
D Wonston (Upton House)	H. J. Gardiner, Esq.	5	1 0	229	..	32·32	191	139
D Andover (Abbots Ann)	Miss E. E. de Paravicini	5	0 10	220	..	32·67	188	136
D Andover (Sewage Works)	W. C. Jerome, Esq.	8	1 0	..	..	31·62	171	135
D Andover (Hatherden)	E. E. Leader, Esq.	5	1 0	350	..	32·11	176	144
D Fyfield Rectory	Rev. E. K. R. Reynolds	5	1 3	255	..	28·97	184	141
D Whitchurch (The Yews)	C. Echlin Gerahty, Esq.	5	1 0	230	..	32·88	197	138
D St. Mary Bourne (Bournside)	Prof. C. V. Boys, F.R.S.	5	1 0	300	..	32·54	189	141
D St. Mary Bourne (Spring Hill)	Mrs. H. A. Boys	5	1 4	300	..	30·81	170	126
D Worting (Manydown Park) . (R)	Col. A. S. Bates, D.S.O.	8	4 0	415	..	39·16	190	144

DIVISION II.—SOUTH-EASTERN COUNTIES—(*con.*).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge Height of Rim above Ground.	Rain-gauge Height of Ground above Sea Level.	Average Rainfall.	1928 Rainfall.	1928 Days with ·01 in. or more.	1928 Days with ·04 in. or more.
HAMPSHIRE—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
4.—TEST & SOLENT—(*con.*).								
Hurstbourne Tarrant (Rookery)	R. E. C. Burder, Esq.	5	1 0	331	..	34·25	(200)	(141)
⊕D Whitchurch (Dunley Manor)	Sir Alfred Herbert	5	1 0	500	..	35·06	190	150
D Vernham Dean (Rowe House)	Mrs. E. H. Gamble	5	1 2	620	..	34·79	192	152
5.—ITCHEN & SPITHEAD. 422 sq. mi.								
D Alverstoke (Monckton House)	Major J. Blake	5	1 3	15	..	33·16	184	131
D Alverstoke (Glencoe)	J. G. Thomas, Esq.....	5	1 3	20	..	31·60	187	131
D Portsmouth (Eastney)	R. J. Jenkins, Esq., C.E....	8	1 0	20	..	30·24	150	118
D Portsmouth (Victoria Park)	Dr. A. Mearns Fraser	5	1 0	15	27·7	32·56	170	130
D Hayling Island (Richmond Ho.)	E. S. McEuen, Esq.	5	1 2	16	..	32·36	172	130
South Hayling (C. of E. School)	H. J. Earney, Esq.	5	1 6	10	..	32·18	173	119
D Lee-on-Solent (Edinburgh Ho Sch)	Trevor J. Tatham, Esq....	5	1 0	15	..	32·44	166	127
D Lee-on-Solent (Hillhead)	I. Hammond, Esq.	5	1 0	15	..	31·71	175	134
Hook-cum-Warsash	E. M. Biggs, Esq.	8	1 0	50	..	32·12	..	131
D Portchester (Noel Cottage)	Miss R. M. Frost	5	1 0	10	..	30·16	164	130
D Titchfield	Capt. E. H. Buxton	5	0 10	25	..	33·26	183	139
D Farlington (Pumping Station)*	D. Halton Thomson, Esq..	5	1 0	77	25·5	31·25	177	131
Farlington (Pumping Station) c	D. Halton Thomson, Esq..	5	1 0	72	..	32·08	..	..
Farlington (Filter Works)	D. Halton Thomson, Esq...	8	1 0	157	..	31·11	..	..
D Havant (Portsmouth W.W.)	D. Halton Thomson, Esq.	5	1 0	25	26·7	33·52	163	125
D Havant (Warblington)	F. D. Crossley, Esq.	8	1 0	22	..	33·74	155	128
D Fareham (Fareham House)	W. S. Stevenson, Esq., M.D.	5	1 6	30	..	33·37	156	131
D Fareham (Roche Court)	Admiral Sir W. De Salis ..	5	1 0	103	..	35·50	181	136
Purbrook (The Haven)	Mr. D. R. McLaren	9	0 10	..	..	35·59	..	..
D Netley (Lake House)	Miss Pennington	8	1 0	54	..	34·11	193	139
D Cowplain (Forest View)	H. C. Pearson, Esq.	5	5 0	222	..	34·72	187	132
D Wickham (The Lower House)	M.-Gn. Sir C. H. Powell, K.C.B.	5	1 4	100	..	34·79	162	132
D Wickham (Park Place)	(R) Major A. F. Clifford	8	1 0	150	..	32·47	163	132
D Southampton (Portswood)	S. G. Stanton, Esq., C.E...	5	1 9	10	..	33·18	174	126
Botley (Brook House)	late Beckett Powell, Esq...	5	1 0	45	..	35·60	..	..
D Botley (Botley Hill)	Lady Jenkyns	5	1 6	36	..	35·09	188	141
Botley (Uplands Farm)	Wilmot H. Yates, Esq.....	5	1 0	60	..	34·90	189	139
D Curdridge (Beechcroft)	late Miss L. M. S. Pasley..	5	1 0	96	..	34·73	210	145
D Curdridge (Kitnocks House)	Major C. F. Randolph	5	1 0	185	..	34·59	214	142
D Swanmore (Holywell House)	Mrs. M. Portal	5	1 6	175	..	35·94	184	151
D Soberton (Mislingford)	E. T. Hildred, Esq., C.E...	5	1 0	136	..	35·49	183	133
D West End (Oaklands)	Capt. P. C. Pearson, R.N.	5	1 0	45	..	35·46	181	137
D Bishops Waltham (Park Ho.)	A. F. Hardy, Esq.....	5	1 3	170	..	33·78	180	139
D Swanmore House	W. H. Myers, Esq.....	5	1 0	390	..	38·66	173	151
D Droxford (Uplands)	Miss A. M. Bridge.....	5	1 0	279	..	41·62	199	162
D Droxford (Fairfield House)	H. Hamilton Bridge, Esq.	5	0 9	254	..	39·12	199	149
D Droxford (Fir Hill)	Capt. Mackenzie-Grieve, R.N.	5	3 6	212	..	40·36	185	137
D Petersfield (Ditcham Park)	C. J. P. Cave, Esq., J.P...	8	1 0	555	..	40·69	207	141
D Otterbourne W.W.	E. C. Rodda, Esq., C.E....	5	1 0	113	..	33·68	191	132
D Owslebury Vicarage	Rev. A. E. Briggs	5	1 1	376	..	33·05	194	149
D Twyford (Pumping Station)	E. C. Rodda, Esq., C.E. ..	8	1 9	139	..	35·46	194	143
D Twyford (Mallards Close)	G. R. Marsh, Esq.	5	1 0	153	..	33·76	192	137
East Meon (Burnside)	H. A. Gilmour, Esq.	5	1 5	..	..	40·84	..	..
D Winchester (Shawford)	J. A. Rooke, Esq.	5	1 0	300	..	35·63	185	131
D Owslebury (Longwood Ho.)	Mr. H. Johnson	5	1 0	450	..	36·22	175	147
D Hursley Park	(R) Sir G. A. Cooper, Bart. ...	10	1 6	240	..	32·30	170	134
d Compton (Kennington)	J. Durst, Esq.	5	1 1	250	..	35·34	(183)	(138)
d Compton (Compton Close)	A. M. Heathcote, Esq.	5	0 10	230	..	35·28	..	(133)
West Meon (Westwood)	Major G. E. Galbraith	5	1 9	470	..	44·08	..	..
w Kilmeston Manor	W. J. Heathcote, Esq	5	1 0	323	..	37·49	..	..
Petersfield (Broadhanger)	Mrs. R. M. Caulfield	5	1 0	730	..	43·27	192	143
D Winchester (High Street)	Kenneth E.N. Williams, Esq.	5	1 0	200	..	35·82	173	135
D Winchester (East Hill)	Mrs. E. Wilde	5	1 0	256	..	32·71	195	140

* Formerly called Havant (Farlington).

DIVISION II.—SOUTH-EASTERN COUNTIES—(*con.*).

STATIONS.	AUTHORITIES.	Rain-gauge: Diam.	Height of Rim above Ground.	Height of Ground above Sea Level.	Average Rainfall.	1928: Rainfall.	Days with ·01 in. or more.	Days with ·04 in. or more.
HAMPSHIRE—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
5.—ITCHEN & SPITHEAD—(*con.*).								
D West Tisted Manor	Capt. Nelson Zambra, M.C.	5	1 3	650	..	41·22	182	142
D Ropley Vicarage	Rev. H. W. C. Geldart	5	0 10	350	..	32·75 ?	183	147
D East Tisted (Rotherfield Park)	Capt. J. B. Scott	5	1 0	550	..	44·79	185	153
d Ovington Rectory	Rev. H. L. Atkins	5	1 0	221	33·2	40·06	..	148
D Alresford (Perin's Grammar Sch.)	G. T. McKay, Esq., M.Sc.	5	1 0	264	..	36·57	181	138
D Itchen Abbas (Chilland)	W. J. Arnold, Esq.	5	1 3	200	..	36·01	221	152
D Old Alresford (The Gables)	A. E. Broad, Esq.	5	1 0	300	..	35·01	159	144
D Worthy Down (Aerodrome)	(+A) Meteorological Office	8	1 0	273	..	33·74	177	137
6.—ARUN. 32 sq. mi.								
D Petersfield (Weston)	Capt. P. W. Seward	5	1 0	330	..	45·20	170	148
D Petersfield (Tilmore)	L. J. Tatham, Esq.	5	1 0	250	..	38·27	180	139
D Petersfield (Stoner Hill)	(+A) C. J. P. Cave, Esq., J.P.	5	1 0	748	..	45·96	184	146
D Liss (Easton)	Miss E. Barton	5	1 0	500	..	40·26	178	143
D Liss (Heathmount)	R. A. Bosanquet, Esq.	5	1 3	490	..	38·90	177	140
d Liss (Berry Grove House)	Col. A. de B. V. Paget	5	1 1	250	..	(38·33)	..	..
D Liss (Kippences)	Rev. W. A. H. Thorold	5	0 9	250	..	40·40	171	137
D Liss (Hawklev Hurst)	T. Clive Davies, Esq.	5	0 11	422	..	44·41	202	152
D Greatham (Manor House)	Miss I. L. Coryton	5	1 0	250	..	37·99	167	145
D Greatham (Le Court)	Sir Heath Harrison, Bart.	5	0 9	350	..	40·95	192	146
7.—THAMES—Wey. 92 sq. mi.								
D Newton Valence Vicarage	Rev. A. C. Maclachlan	5	1 0	586	..	38·45	206	140
D Newton Valence Place	(R) Rear-Adl. E. Jervoise, C.B.E.	8	1 5	615	..	33·78	207	142
D Selborne (The Wakes)	Mrs. Bibby	5	1 0	400	..	41·03	193	154
D Grayshott	Mrs. Lyndon	5	1 0	661	33·2	38·79	199	151
Headley (Hartfield)	Sir S. Renshaw, Bart.	5	1 1	220	..	(37·35)	..	..
D Alice Holt Forest	Office of Woods	8	1 0	264	..	34·51	197	140
8.—THAMES—Loddon. 164 sq. mi.								
d Swainshill	S. G. Weller, Esq.	5	3 0	..	..	34·88	..	116
D Long Sutton (Agric. Coll.)	The Warden	5	1 0	479	..	32·65	164	141
d South Warnborough (Vine Cot.)	Mrs. Gawne	5	1 0	416	..	29·90	..	..
D Aldershot (Sewage Works)	Dr. G. W. Routley	5	1 0	231	..	30·55	194	133
D Greywell (Pumping Station)	S. G. Weller, Esq.	5	1 0	258	..	28·39	226	140
D Hook (Nately Hatch)	R. C. Mallock, Esq.	5	1 0	328	..	30·39	189	137
D Sherborne St. John	Rear-Admiral A. S. Lafoné	5	1 0	260	29·0	31·96	173	138
D Farnborough School	R. A. Ingram, Esq.	5	1 2	250	..	26·35	159	126
d Hartley Wintney (Ferney Close)	A. E. Du Buisson, Esq.	5	1 11	251	..	27·76	..	..
D Hartley Wintney	Sanitary Inspector, R.D.C.	5	1 0	202	..	25·83	156	121
D South Farnborough (R.A.E.)	(+A) The Meteorological Office	8	1 0	237	26·1	27·94	177	128
D Winchfield (Elvetham Park)	Mr. T. J Brownjohn	8	1 0	217	..	30·33	183	135
D Bramley (Street Farm House)	F. Walkinshaw, Esq.	8	1 0	227	..	30·84	179	141
D Stratfield Turgis (Byland's)	Miss D. Page-Roberts	5	0 8	218	..	30·80	188	153
D Heckfield (Park Corner)	Miss V. Martineau	5	1 2	257	24·3	27·39	181	123
9.—THAMES—Kennet. 65 sq. mi.								
D Wolverton (Ewhurst Park)	Mr. H. J. Beckingham	5	1 6	500	..	33·18	202	144
D Highclere (Castle Gardens)	Mr. A. W. Blake	5	1 6	500	..	35·94	187	142
D Highclere (Black Ford)	W. A. Turner, Esq.	5	1 0	439	..	36·18	176	143
D Highclere (Adbury Pk. Gdns.)	Mr. M. J. Lever	5	1 0	350	..	34·89	162	132
BERKSHIRE. (Area, 722 sq. mi.)								
1.—TEST. 2 sq. mi.								
2.—THAMES—Bourne. 15 sq. mi.								
Sunninghill (Frognal)	Mr. D. Chaplin	5	1 0	200	..	28·59	..	..
D Ascot (Heatherwood Hospital)	The Medical Superintendent	5	1 0	320	..	26·73	173	133

DIVISION II.—SOUTH-EASTERN COUNTIES—(*con.*).

STATIONS.	AUTHORITIES.	Rain-gauge: Diam.	Height of Rim above Ground.	Height of Ground above Sea Level.	Average Rainfall.	1928: Rainfall.	Days with ·01 in. or more.	Days with ·04 in. or more.
BERKSHIRE—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
3.—THAMES—Loddon & c. 162 sq. mi.								
Finchampstead (Manor Farm)	M. B. Powell, Esq.	5	1 6	238	..	26·18	..	..
d Finchampstead (Pye Hill)	Col. M.A. Carlisle Crowe, C.M.G.	5	1 0	320	..	(25·12)	(173)	(124)
D Wellington College	A. L. Payne, Esq.	5	1 0	290	26·4	22·73	183	124
d Broadmoor Asylum	The Medical Superintendent	5	1 0	400	..	25·08	..	125
D Wokingham	C. W. Marks, Esq.	5	1 0	174	..	26·43	179	135
d Wokingham (Appin Lodge)	Rev. W. N. Blakeney	8	0 10	200	..	27·20	..	..
d Wokingham (Sindlesham Ho.)	Mr. W. Balcombe	5	4 6	200	..	26·78	..	132
d Bracknell (Hillside)	Mrs. B. C. Littlewood	5	1 0	207	..	28·17	..	137
D Winkfield (Ryemead)	Mrs. Aubrey Elliott	5	0 10	220	..	26·67	182	144
D Winkfield (Maidens Green)	R. Crosbie-Hill, Esq.	5	1 0	210	..	26·20	178	141
D Windsor (Royal Gardens)	Mr. C. H. Cook	5	1 0	88	24·9	27·42	176	136
D Windsor (Bicton)	Miss M. G. Cookson	8	1 0	88	..	26·76	178	137
Pinkney's Green (Pinkney's Ldge)	R. P. Lord, Esq.	5	0 10	240	..	26·98	..	..
D Remenham Hill (Wedmore)	Lt.-Col. C.D. Burnell, D.S.O.	5	1 0	300	..	30·00	192	137
D Hambleden Lock	Mr. T. E. Wise	5	1 6	120	..	29·91	186	133
d Hurley House	Rev. W. Farrer	5	1 0	105	..	25·13	..	117
4.—THAMES—Kennet & c. 224 sq. mi.								
D Inkpen (Manor Farm)	A. A. Lawrence, Esq.	5	1 5	450	..	34·18	198	142
D Inkpen (Willows)	G. C. Goodhart, Esq.	5	1 0	475	..	34·23	171	133
D Hampstead Marshall (Redhill)	Mrs. Lewis	5	1 0	400	..	31·70	150	124
D Mortimer (Wokefield Park)	A. Palmer, Esq.	5	1 0	220	..	27·67	181	132
D Mortimer (Oakfield)	Rev. G. G. Skipwith	6	1 0	200	..	25·18	184	127
D Brimpton (Stonehouse)	F. Hadden, Esq.	5	0 7	350	..	31·49	177	130
Kintbury (Wallingtons)	A. S. Gladstone, Esq.	5	1 0	360	..	29·76	..	..
D Newbury (Greenham Common)	H. L. Bowman, Esq., D.Sc.	5	1 0	327	29·0	32·82	198	136
D Newbury (Wash Hill)	C. F. B. Marshall, Esq.	5	1 0	385	..	35·03	209	149
D Newbury (Tydeham)*	J. H. Spackman, Esq.	5	1 0	400	..	33·95	206	150
D Shinfield (University Col. Farm)	Dr. J. A. Crowther	5	1 0	200	..	26·81	177	128
D Bucklebury Place	Dr. Carl Langer	5	1 0	409	..	29·54	180	133
D Reading (Leighton Pk. Sch.)	D. S. Gray, Esq.	5	1 0	264	..	26·22	187	127
D Reading W.W. (Bath Road)	L. C. Walker, Esq., C.E.	5	1 0	218	..	25·28	187	132
D Reading (Tilehurst)	Miss M. W. Latham	5	1 4	200	..	29·21	206	141
D Reading (Forbury Gardens)	A. S. Parsons, Esq., C.E.	5	1 5	143	24·9	24·50	174	124
D Reading (University College)	Dr. J. A. Crowther	5	1 0	152	..	25·20	188	126
Reading (Caversham Lock)	The Thames Conservancy	5	1 6	123	..	24·36	159	125
5.—THAMES—Ock & c. 319 sq. mi.								
D Reading (Englefield)	J. H. Benyon, Esq.	5	1 0	175	27·4	28·68	168	129
D Hermitage (Oare)	F. Bateson, Esq.	5	1 0	450	..	28·28	191	124
d Lower Basildon (Estate Office)	Maj. J. A. Morrison, D.S.O.	8	1 0	..	..	28·42	..	..
D Upton (Manor House)	Miss C. S. Fry	5	1 0	240	..	23·28	186	119
D Wantage Vicarage	Rev. A. Gossage Robinson	5	0 9	312	..	24·85	197	124
D Uffington Vicarage	Rev. E. M. Hadow	5	1 0	287	..	26·03	174	117
Steventon (Milton Hill)	R. H. Betteridge, Esq.	5	1 6	300	..	22·83	..	..
D Wallingford (St. Leonard's R.)	Rev. A. Simmons	5	1 4	142	..	24·65	177	118
D Wallingford (Woodlea)	G. F. Slade, Esq., M.B.E.	5	0 9	200	26.5	23·37	177	117
D Wallingford Castle	Miss E. Hedges	5	1 6	175	..	24·44	190	128
D Wallingford (Style Acre)	A. L. Morphew, Esq.	5	1 4	220	..	23·24	168	124
D Abbots Wittenham Rectory	Rev. W. F. B. Ward	5	1 0	190	..	19·24	179	111
D Long Wittenham (Willington)	H. J. Hewett, Esq.	5	1 0	167	..	22·52	169	125
D Faringdon (The Nurseries)	Messrs. R. Tucker & Sons	5	1 0	400	..	28·29	159	121
D Abingdon (Sewage Works)	W. H. Lewis, Esq., C.E.	8	1 0	169	..	21·85	183	115
D Abingdon (Twickenham House)	G. Saxby, Esq.	5	1 0	197	..	22·46	169	119
D Abingdon (The Firs)	Miss G. G. Challenor	5	1 3	200	..	21·71	181	115
D Abingdon (Donnington)	R. W. Langford, Esq.	5	1 6	199	..	24·03	190	116
D Abingdon (Northcourt House)	M. T. Tatham, Esq.	5	1 0	190	..	20·66	169	107
D Oxford (Kennington Nursery)	W. G. Gray, Esq.	5	0 10	300	..	22·27	150	110

* Formerly called (Andover Road).

DIVISION III.—SOUTH MIDLAND COUNTIES.

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge Height of Rim above Ground.	Height of Ground above Sea Level.	Average Rainfall.	1928 Rainfall.	Days with .01 in. or more.	Days with .04 in. or more.
MIDDLESEX. (Area, 232 sq. mi.)		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
1.—THAMES—Colne & Brent. 185 sq. mi.								
Weybridge (Shepperton Lock)	Thames Conservancy	5	1 0	41	..	24·42	..	126
D Littleton (Queen Mary Res.)	Met. Water Board	5	1 0	44	..	24·35	160	128
D Hampton Waterworks	Met. Water Board	5	1 0	27	..	24·55	166	122
d Hampton (The Manor House)	J. Hughes, Esq.	5	2 0	43	..	22·61	..	115
D Teddington (Holmesdale)	E. J. Allcard, Esq.	5	4 2	25	..	25·06	159	127
D Staines Reservoir (West Side)	Met. Water Board	5	1 6	53	..	24·67	205	133
D Staines Reservoir (East Side)	Met. Water Board	5	1 6	53	..	25·08	208	132
D Twickenham (Sewage Works)	The Borough Surveyor	5	1 7	37	..	25·43	161	128
D Sipson (Hollycroft)	Mr. W. J. Mitchell	5	1 0	94	..	26·52	163	143
D Kew Bridge (Waterworks)	Met. Water Board	5	1 0	36	..	25·34	167	128
d Chiswick (Turnham Green)	E. Willis, Esq., C.E.	8	1 0	21	..	24·99	..	..
D Ealing (St. Paul's Vicarage)	Rev. A. H. Cooper	5	1 6	100	..	27·54	198	142
D Ealing (Longfield Avenue)	W. R. Hicks, Esq., C.E.	5	0 9	114	..	23·79	160	123
D Ealing (Gordon Road)	H. Satchell, Esq.	5	1 0	105	..	25·84	180	126
D Ealing (St. Stephen's Road)	H. W. Peal, Esq.	5	0 10	156	..	26·47	168	130
d Hillingdon (Dawley Court)	Cecil De Salis, Esq.	8	0 8	100	..	27·31	..	..
D Ealing (Hanger Hill Reservoir)	Met. Water Board	5	1 0	206	..	27·12	169	130
D Perivale (Northern Sewage Farm)	W. R. Hicks, Esq., C.E.	5	0 5	56	..	26·44	184	138
D Alperton (Sewage Works)	C. R. W. Chapman, Esq., C.E.	8	1 2	80	..	27·75	184	136
d Willesden Reservoir	Met. Water Board	5	1 0	167	..	27·99	159	129
D Willesden Green (Strode Road)	Miss Lamport	5	1 0	150	..	27·90	199	136
D Willesden (Stonebridge Fm.) (R)	F. Wilkinson, Esq., C.E.	10	5 9	100	..	26·60	164	121
D Sudbury (Station Approach)	L. H. Powers, Esq.	8	1 0	153	..	27·45	185	133
D Golders Green (Dunstan Road)	Capt. A. E. Mackenzie	5	1 0	240	..	27·52	177	128
D Highgate (North Hill Depot)	W. H. Adams, Esq., C.E.	5	5 4	309	..	26·94	171	127
d Harrow (Rosebank Avenue)	C. L. Modlen, Esq.	5	1 0	200	..	26·47	(165)	(123)
D Harrow (Oakhurst)	Hugh Gardner, Esq.	5	1 0	295	..	27·80	184	134
d Harrow (Bessborough Rd. Depot)	J. P. Bennetts, Esq., C.E.	5	1 0	215	..	29·82	..	136
D Hendon (Sewage Works)	A. O. Knight, Esq., C.E.	6	1 6	153	..	26·15	168	123
D Hendon (Central School)	J. Burgess, Esq.	5	1 2	200	..	26·79	188	130
d Wealdstone (Sewage Works)	H. Walker, Esq.	5	1 0	154	..	27·61	169	129
d Wealdstone (Kodak Works)	Messrs. Kodak, Ltd.	5	1 0	198	..	27·16	..	..
D Pinner (West End Lane)	Mrs. Fowler	5	1 6	165	..	28·38	183	133
d Harrow (Wealdstone House)	Miss H. O. E. Cobb	5	1 0	236	..	28·69	..	..
Northwood (Tandridge)	Chas. Price, Esq.	5	1 0	..	..	28·18	162	140
d Northwood (Haslemere)	Miss L. McBean	5	1 0	240	..	32·25	..	127
D Mill Hill (Ridgeway House)	Major N. G. Brett-James	5	1 0	375	..	25·90	161	129
D Bushey Heath (Highfield)	W. B. Worthington, Esq. C.E.	5	1 0	503	..	28·71	173	124
d Elstree	G. V. Maxted, Esq., C.E.	8	1 0	490	..	(28·12)	(172)	(129)
D Potters Bar (Mount Grace)	Mr. E. W. Halsey	5	1 3	375	..	28·51	173	139
2.—THAMES—Lea. 47 sq. mi.								
D Stroud Green (Mount View Rd.)	L. R. Bennett, Esq.	5	1 0	212	..	25·86	171	124
D Crouch End (Barrington Road)	W. H. Adams, Esq., C.E.	8	3 10	122	..	28·83	183	139
D Tottenham (Drayton Road)	Medical Officer of Health	5	1 3	51	23·3	25·68	161	133
D Hornsey (High Street)	Met. Water Board	5	1 2	107	..	26·69	164	127
Muswell Hill (Grand Avenue)	V. S. M. Williams, Esq.	5	1 5	317	..	27·27	..	..
D Muswell Hill (Sewage Farm)	W. H. Adams, Esq., C.E.	8	4 5	214	..	28·99	182	137
D Wood Green (Maryland Road)	F. C. Hornsey, Esq.	6	1 0	110	..	25·82	170	127
D Finchley (Victoria Park)	P. T. Harrison, Esq., C.E.	5	1 0	272	..	28·22	182	146
D North Finchley	Miss M. Shoults	5	1 0	290	..	28·26	185	124
Bowes Park (Palmerston Road)	W. H. Heathfield, Esq.	5	1 5	100	..	26·61	161	119
D Palmers Gr. (Broomfield Pk.) (+A)	R. Phillips, Esq., C.E.	8	1 0	136	..	27·51	146	128
D Southgate	Dr. A. S. Ransome	5	1 0	250	..	28·98	204	134
D Ponders End (Bylock Hall)	H. E. Freir, Esq.	5	1 0	50	..	24·36	172	122
D Ponders End Pumping Station	Met. Water Board	5	1 0	45	..	23·92	165	123
D Enfield (Southbury Road)	Met. Water Board	5	1 0	105	24·7	25·71	177	125
D Enfield (Roselands, Turkey St.)	E. S. Rashleigh, Esq.	5	1 0	70	..	24·14	178	123
D Waltham Cross (Sewage Works)	J. E. Sharpe, Esq.	5	1 0	61	..	24·49	161	119

DIVISION III.—SOUTH MIDLAND COUNTIES—(*con.*).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge: Height of Rim above Ground.	Height of Ground above Sea Level.	Average Rainfall.	1928: Rainfall.	Days with .01 in. or more.	Days with .04 in. or more.
HERTFORDSHIRE. (Area, 635 sq. mi.)		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
1.—THAMES—Thame. 10 sq. mi.								
D Tring (Akeman St.)	T. Grace, Esq.	8	1 0	450	..	29·58	183	131
D Tring (Pendley Manor)	Mrs. J. G. Williams	5	1 0	420	..	31·42	181	146
D Tring (Brookfield)	Brig.-Gen. C. J. Steavenson	6	1 3	430	..	27·46	178	130
2.—THAMES—Colne & Brent. 199 sq. mi.								
D Northwood (Woodhouse Eaves)	Miss S. F. Fox, M.D.	5	1 0	400	..	31·13	188	143
D Heronsgate (Sherwood)	Miss K. Felkin	5	0 11	350	..	28·72	172	140
D Bushey Heath (California La.)	C. A. Cooper, Esq.	5	0 10	500	..	29·85	162	125
Rickmansworth (Croxley Green)	S. Ingleby Oddie, Esq.	5	1 0	262	..	31·02	..	..
D Totteridge (West Lodge)	J. C. Hyland, Esq.	5	1 0	390	..	29·21	173	125
D Barnet (Summerhill)	F. A. Milne, Esq.	5	1 0	400	..	25·69	173	121
D Barnet (Bedford Avenue)	Miss M. Haines	5	1 4	350	..	28·85	188	142
D Barnet (Normandy Avenue)	P. J. Neville, Esq, C.E.	5	1 0	409	..	27·84	184	128
d Elstree (Aldenham House)	Mr. E. Beckett	5	1 0	305	..	28·12	..	137
D Watford (Oxhey Grange)	J. Doyle Penrose, Esq.	5	1 0	295	..	28·74	162	127
D Watford (Colne Valley W. W.)	C. P. Sinclair, Esq.	5	1 2	200	..	29·61	171	132
d Watford (Municipal Offices)	W. W. Newman, Esq., C.E.	6	1 9	175	..	27·74	..	..
Watford (Cassiobury Pk. Av.)	E. A. Robins, Esq.	5	1 0	240	..	28·10	..	..
D Watford (Park Road)	E. J. Slinn, Esq.	5	1 6	257	..	27·79	180	126
D Heronsgate (Waterfield House)	A. J. Richardson, Esq.	5	1 0	390	..	29·85	177	141
D Sarratt (Micklefield Green)	J. O. Hickman, Esq.	5	1 0	380	..	29·19	187	140
d Shenley Grange	J. Charrington, Esq.	5	0 9	430	..	30·41	..	132
D Shenley (Kitwells)	T. H. Riches, Esq.	5	1 0	420	..	29·92	168	145
D Sarratt (Goldingtons)	P. Clutterbuck, Esq.	5	1 0	384	..	31·29	159	140
D Chipperfield (Little Callipers)	A. W. Rivington, Esq.	5	1 0	407	..	28·26	157	128
D Kings Langley (Fir Tree Cottage)	Edward Toms, Esq.	5	1 0	300	..	28·17	166	138
D Park Street (Bricketwood)	F. J. McLees, Esq.	5	1 0	200	..	26·44	165	122
D Hemel Hempstead (Apsley Mills)	Messrs. J. Dickinson & Co.	24	1 4	268	27·9	28·67	192	140
D Colney Heath (Tyttenhanger P.S.)	J. F. Haseldine, Esq.	5	1 0	241	..	26·00	172	121
D St. Albans (Co. Mental Hosp.)	G. Goodchild, Esq.	5	1 0	295	..	25·67	153	117
D St. Albans (County Museum)	Mrs. Bullen	5	1 0	389	..	27·18	156	127
D St. Albans (Oaklands)	J. Hunter Smith, Esq.	5	1 0	272	..	25·70	167	116
D St. Albans (Gorhambury)	Mr. O. Twitchett	5	1 0	423	..	28·86	149	129
D Hatfield (Hatfield P. Stn.)	J. F. Haseldine, Esq.	5	1 0	334	..	25·52	151	113
D Berkhamsted (Rossway)	The Lady Hadden	5	1 3	590	..	28·95	221	141
D Berkhamsted (Anglefield)	E. T. Browne, Esq.	5	1 0	450	29·8	31·22	179	127
d Berkhamsted (Amersfort)	Mrs. Walter Cohen	5	1 0	510	..	28·70	..	..
D Berkhamsted Golf Club	J. W. A. Parrott, Esq.	8	1 0	550	..	30·05	153	128
D Tring (Cowroast Lock)	W. Yates, Esq., C.E.	5	3 6	394	..	30·73	168	130
D Harpenden (Rothamsted) (+A)	Lawes Agricultural Trust.	8	0 9	420	26·7	25·72	158	124
D Harpenden (Rothamsted)	Lawes Agricultural Trust.	5	1 0	420	..	26·53	167	124
D Harpenden (Rothamsted)	Lawes Agricultural Trust	72×87	0 9	420	..	28·46	198	129
3.—THAMES—Lea. 340 sq. mi.								
d Cheshunt (Manor House)	J. E. Sharpe, Esq.	5	1 0	83	..	24·02	..	115
D Northaw School	C. Steventon, Esq	5	1 0	400	..	25·56	164	116
D Cheshunt Yard	Met. Water Board.	5	1 0	100	..	24·52	165	118
D Cheshunt (Cheshunt Park)	J. A. Wanklyn, Esq.	5	0 9	209	..	24·66	177	122
D Cheshunt (Darnicle Hill P. Stn.)	Met. Water Board.	5	1 0	250	..	25·51	175	136
D Hertford (Epping House)	Lady Brodie Henderson	5	0 9	400	..	25·91	176	127
d Essendon Place Gardens	J. B. Healing, Esq.	5	1 0	365	..	26·99	..	120
Little Berkhampstead	A. Noble, Esq.	5	1 0	380	..	(25·44)	..	..
d Hatfield (Co. Surveyor's Office)	Lt.-Col. A. E. Prescott, C.E.	5	1 0	265	..	23·18	..	118
D Hoddesdon	H. F. Hayllar, Esq.	5	5 0	120	..	23·95	157	119
D Hoddesdon (Feilde's Weir)	Met. Water Board.	8	1 7	95	..	23·97	167	123
D Haileybury College	B. M. C. Marshall, Esq.	8	1 4	270	..	25·70	178	127
D Hertford (Bayfordbury)	H. W. Clinton Baker, Esq.	8	1 2	250	..	24·59	169	127
D Stanstead Abbots (Warrax)	E. H. Barlow, Esq.	5	1 2	110	..	23·90	170	132
D Gilston Park	Mr. J. Dewhurst	8	1 0	175	..	25·10	166	131
D Welwyn Garden City	H. A. Cook, Esq., C.E.	5	1 0	285	..	23·82	155	115
D Hertford (Sewage Works)	Met. Water Board.	8	1 0	120	..	24·54	181	124
D Ware (Red House)	Met. Water Board.	5	1 0	105	..	24·63	166	123

DIVISION III.—SOUTH MIDLAND COUNTIES—(*con.*).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge Height of Rim above Ground.	Height of Ground above Sea Level.	Average Rainfall.	1928 Rainfall.	Days with .01 in. or more.	Days with .04 in. or more.
HERTFORDSHIRE—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
3.—THAMES—Lea—(*con.*).								
D Ware (Chadwell Spring)	Met. Water Board	5	1 0	140	..	25·33	162	123
D Welwyn Garden City (Valley Rd.)	Comdr. W. George Lingham	5	1 0	300	..	23·93	190	115
d Welwyn (Codicote Lodge)	Mr. G. J. Miller	5	1 0	340	..	24·26	..	117
D Much Hadham	T. Woodham Mott, Esq.	5	1 0	212	..	25·40	181	128
D Much Hadham (Lordship)	Capt. W. Glynes Bruty	5	..	205	..	25·22	166	125
D Bishop Stortford (Twyford H.)	Laurie Frere, Esq.	5	1 0	181	..	24·53	170	128
Watton (Frogmore Hall)	Lt.-Col. J. B. Gilliat, D.S.O.	5	0 9	250	..	24·25	..	119
d Standon	F. H. Wace, Esq.	5	2 0	375	..	22·06	..	..
D Benington House	Miss E. A. Parker	5	1 0	407	24·9	24·92	185	120
D Little Hadham (Hadham Hall)	W. Minet, Esq.	5	0 10	338	..	25·13	160	133
D Hitchin (Preston)	R. de V. Pryor, Esq.	8	1 0	484	..	26·24	156	130
d Buntingford (Coles)	Mrs. Bryan Laing	5	0 8	375	..	(23·17)	..	..
D Furneaux Pelham (The Brewery)	G. Warren Bindloss, Esq.	5	1 0	300	..	25·64	168	127
D Royston (Therfield Rectory)	Rev. H. R. Humphreys	5	1 0	513	25·2	24·82	173	130
4.—OUSE. 86 sq. mi.								
D Offley (School House)	C. W. Mears, Esq.	5	1 0	526	..	25·20	160	130
D Graveley Rectory	Rev. R. E. C. Walker	5	0 10	325	..	29·38	192	146
D Hitchin (Newlands)	F. Ransom, Esq.	5	1 0	271	..	26·00	185	133
D Hitchin (High Down)	Miss E. Pollard	5	1 1	421	..	25·31	219	139
D Letchworth (Roxley Ho. Willian)	Miss H. V. Bendixson	5	1 6	375	..	26·08	187	137
D Letchworth (Gernon Road)	A. W. Brunt, Esq.	5	1 0	280	..	23·22	189	119
d Letchworth (Sollershott)	Miss H. Leather	5	1 0	300	..	23·29	(176)	(119)
D Letchworth (Sollershott West)	Edward Grubb, Esq.	8	0 11	310	..	23·21	183	121
D Letchworth (Fire Station)	The Surveyor, U.D.C.	5	1 3	290	..	23·03	204	133
D Letchworth (New Sewage Works)	The Surveyor, U.D.C.	5	1 0	195	..	21·95	173	110
D Baldock	Dr. Bertram Suggit	8	2 0	210	..	22·39	155	112
D Barley (Dalnyveed)	E. M. Cook, Esq.	5	1 0	300	..	22·95	148	115
D Royston (Earls Hill House)	Col. E. C. M. Phillips, D.S.O.	8	1 3	225	..	22·50	176	121
BUCKINGHAMSHIRE. (Area, 743 sq. mi.)								
1.—THAMES—Cherwell. 30 sq. mi.								
2.—THAMES—Thame. 158 sq. mi.								
D Princes Risborough	A. A. Kidson, Esq.	5	0 6	360	..	29·89	185	129
D Towersey Vicarage	Rev. H. E. Cooper	5	1 0	250	..	28·66	184	143
Ellesborough (The Springs)	J. K. Bateman, Esq.	5	1 2	400	..	26·86	..	..
D Little Kimble	Dr. L. T. Burra	5	0 10	370	..	25·86	178	123
d Cuddington School	A. R. Alldridge, Esq.	5	1 0	292	..	(26·28)	..	..
D Tring (Bulbourne)	W. Yates, Esq., C.E.	5	2 3	401	..	24·17	174	126
D Aylesbury (Sewage Works)	W. H. Taylor, Esq.	5	1 0	251	..	29·14	176	147
d Mentmore Gardens	Mr. T. Lindores	5	1 3	400	..	26·28	..	125
D Quainton (Quainton Cottage)	L. H. West, Esq., O.B.E.	5	1 0	350	..	26·70	170	131
3.—THAMES—Wye & c. 129 sq. mi.								
D Eton (Tangier Island)	E. A. Stickland, Esq.	5	0 6	68	..	26·29	181	134
D Slough (Upton)	R. Bentley, Esq.	5	1 0	78	23·9	26·33	174	133
D Taplow (Hitcham Grange)	Hon. C. S. Irby	5	0 9	180	..	25·48	164	136
D Henley-on-Thames (Greenlands)	Lord Hambleden	5	1 0	116	..	30·55	154	131
D Hedsor (Bourne End)	J. Wood, Esq.	8	1 0	170	..	37·41	162	144
D Dropmore Vicarage	Rev. J. H. Harvey	5	1 0	300	..	29·92	191	145
D Bourne End	Major Forbes Holland	5	2 0	91	..	31·06	184	135
D High Wycombe (Flackwell Hth.)	E. Dickson Park, Esq.	5	1 10	365	..	28·34	177	134
D High Wycombe (Easton St.)	H. S. Wheeler, Esq.	5	0 11	253	25·9	33·32	203	146
High Wycombe (Roy. Gram. Sch.)	The Head Master	8	1 0	545	..	31·94	..	..
d Penn (Woodside)	Miss E. M. T. Epps	9	0 9	500	..	(34·09)	..	..
D Penn (Rayners)	Mr. E. Peett	5	1 3	547	..	32·93	179	133
D Hampden House	Earl of Buckinghamshire	5	1 0	695	..	30·47	174	130

DIVISION III.—SOUTH MIDLAND COUNTIES—(*con.*).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge: Height of Rim above Ground.	Rain-gauge: Height of Ground above Sea Level.	Average Rainfall.	1928: Rainfall.	1928: Days with ·01 in. or more.	1928: Days with ·04 in. or more.
			ft. in.	*ft.*	*in.*	*in.*		
BUCKINGHAMSHIRE—(*con.*).								
4.—THAMES—Colne. 133 sq. mi.								
d	Wraysbury School ..... R. Watson, Esq.	5	0 8	59	..	24·65	..	..
D	Slough (Ditton Park) ..... G. B. Harrison, Esq.	5	3 0	70	..	26·42	163	138
D	Slough (Langley) ..... R. H. Major, Esq.	8	0 10	85	23·9	25·69	164	129
d	Slough (Seed Trial Ground) .... Messrs. Sutton & Sons	5	0 9	100	..	26·96	..	..
D	Stoke Poges (Council School) .. S. A. Moore, Esq.	5	1 0	210	..	29·99	190	145
D	Gerrards Cross (Bulstrode Gdns) Mr. G. Taylor	5	1 6	280	..	29·75	157	138
d	HighWycombe(HazlemereSch.) A. J. Chapman, Esq.	5	1 0	568	..	30·07	..	..
D	Chalfont St.Giles(Roughw'd Pk.) Thurston Agelasto, Esq. ..	5	1 0	400	..	29·66	178	136
D	Amersham (The Plantation) .. G. Weller, Esq.	8	1 0	464	..	28·03	171	124
D	Amersham Common (Stanmore) W. Garton, Esq.	5	1 0	520	..	33·06	187	135
d	Wendover (Mayortorne Manor) Miss I. Fry	5	0 9	520	..	30·54	..	..
5.—OUSE. 293 sq. mi.								
D	Oving House ..... Mrs. H. Yates Thompson ..	5	1 0	515	28·1	28·59	190	135
D	Wing (Burcott) ..... R. H. Ayres, Esq.	5	1 6	407	..	30·89	208	150
D	Swanbourne House School .... L. L. C. Evans, Esq.	5	1 0	411	..	27·27	163	140
D	Mursley Hall ..... Lady Beecham	8	1 0	490	..	26·38	161	129
d	Addington (C. of E. School) ... J. H. Webster, Esq.	5	0 7	320	..	(25·75)	..	..
D	Buckingham (Market Hill) .... A. Pettipher, Esq.	5	1 6	300	..	24·80	195	128
D	Wavendon (Endowed School) .. T. G. M. Watson, Esq. ...	5	0 9	300	..	25·98	198	141
D	Stony Stratford (Calverton L.) Lt.-Col. L. C. Hawkins....	5	1 0	230	..	24·90	163	119
D	Wolverton (St. George's Vic.) . Rev. Canon W. L. Harnett.	5	1 0	270	..	24·87	194	119
D	Wolverton (Gables Lodge) .... J. Forster, Esq.	5	1 0	264	..	25·60	226	125
d	Wolverton (Council School) .... E. T. Smart, Esq.	5	5 0	263	..	22·69	..	..
d	Turvey (Brayfield House) ..... Major D. Farrer, J.P.	5	1 0	188	..	24·39	..	..
OXFORDSHIRE. (Area, 756 sq. mi.)								
1.—SEVERN—Upper Avon. 10 sq. mi.								
D	Sibford Ferris (Woolman Cottage) Joshua Lamb, Esq.	5	1 0	570	27·0	28·08	199	127
D	Sibford Gower ..... S. N. Baker, Esq.	5	1 0	600	..	27·32	151	118
2.—THAMES—Windrush & c. 261 sq. mi.								
D	Bampton (C.E. School) ..... E. W Fry, Esq.	5	0 10	233	..	26·37	152	141
D	Witney (Cokethorpe) ..... Major H. G. Feilden	5	3 0	230	..	26·56	161	147
D	Eynsham (Barnard Gate) ..... Basil de F. Osmaston, Esq.	5	4 9	245	..	23·78	160	118
D	Leafield (Wireless Station) (+A) Meteorological Office.....	8	1 0	612	27·3	28·79	193	136
d	Charlbury (Cornbury Park) ... Mr. B. Campbell	5	1 0	420	..	33·10 ?	..	136
D	Wootton Rectory ..... Rev. F. R. Marriott	5	1 0	370	..	27·89	178	136
D	Lyneham ..... R. de M. Pratt, Esq.	5	1 0	351	..	28·03	183	137
d	Glympton Park ..... (R) .Lt.-Col. G. H. Barnett ...	8	2 0	..	..	28·28	153	125
D	Chadlington (Langston House) Lt.-Col.F.W.Schofield,CMG.	5	1 0	430	..	28·22	171	136
D	Chipping Norton (HeythropCol.) Rev. L. Cardwell, S.J.	8	1 0	600	..	27·18	181	139
D	Chipping Norton (Bungalow) .. T. H. Burbidge, Esq.	5	1 0	700	..	28·54	179	137
3—THAMES—Cherwell. 250 sq. mi.								
D	Nuneham Park Gardens ..... Mr. A. J. Hines	8	1 0	280	..	24·10	190	129
D	Sandford-on-Thames ..... Prof. J. A. S. Watson.....	5	1 0	210	..	21·82	165	113
D	Oxford (Hincksey Pumping Sta.) City Engineer	8	1 0	187	..	22·26	179	116
	Oxford (Osney Lock) ..... Thames Conservancy	5	1 6	188	..	23·80	182	133
D	Oxford (Magdalen College) .... J. J. Manley, Esq.	5	1 0	186	23·8	21·95	197	114
D	Oxford (Radcliffe Obs.) (+A) .. H. Knox Shaw, Esq.	8	1 8	208	24·8	22·65	180	114
D	Headington (Warneford Asy.) .. Dr. A. W. Neill	5	1 0	300	..	22·82	156	119
d	Headington (Forest Lodge) ... Major A. V. Spencer, D.S.O.	5	0 11	333	..	21·90	..	111
D	Headington (Charlton Lea) ... L. Dawes, Esq.	5	1 0	300	..	24·82	171	128
D	Headington Hill (Thornhill) .. E. S. Fry, Esq.	5	1 0	..	..	24·12	175	124
D	Elsfield (Home Farm) ..... Miss M. J. Parsons	5	1 0	355	..	22·51	163	120
D	Middleton Park ..... The Earl of Jersey	5	2 6	326	26·7	27·18	177	135
d	Upper Heyford ..... (+A) The Meteorological Office ..	8	1 0	408	..	(25·47)	..	..
D	Steeple Aston (The Grange) ... Arthur E. Bradshaw, Esq..	8	1 0	400	27·2	26·86	188	130
D	Steeple Aston (Hill House) .... B. S. Ogle, Esq.	5	1 0	406	..	26·91	187	129

DIVISION III.—SOUTH MIDLAND COUNTIES—(*con.*).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge Height of Rim above Ground.	Rain-gauge Height of Ground above Sea Level.	Aver-age Rain-fall.	1928 Rain-fall.	1928 Days with ·01 in. or more.	1928 Days with ·04 in. or more.
OXFORDSHIRE.—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
3.—THAMES—Cherwell.—(*con.*).								
d West Adderbury (St. Amand's)	Miss M. M. Bradford	8	1 6	320	..	26·86	..	123
D Adderbury (Cross Hill)	Lt.-Col. H. E. du C. Norris	5	0 10	338	..	25·70	191	127
D Adderbury (The Rookery)	C. C. Bradford, Esq.	8	1 0	323	..	28·68	187	134
D Adderbury (Little Manor)	Lt.-Col. H. E. du C. Norris	5	0 10	..	..	26·47	191	135
D Banbury (Cotefield)	C. N. Keyser, Esq.	5	1 0	300	..	26·40	156	134
D Bodicote (C. of E. School)	A. Ridge, Esq.	5	1 0	391	..	27·52	156	129
D Broughton Rectory	Rev. B. W. Bradford	5	1 6	370	..	27·27	181	130
D North Newington (Grafton Cot.)	W. Pikesley, Esq.	5	1 0	425	..	25·35	173	132
D Grimsbury (Banbury W. W.)	W. E. Wood, Esq.	5	1 3	316	..	25·79	187	136
Wroxton	Hon. Mrs. Fitz Gerald	12	1 6	500	..	27·16	..	..
4.—THAMES—Thame & c. 210 sq. mi.								
D Caversham (St. Peter's Hill)	Rev. G. V. Proctor	5	1 0	220	..	25·64	168	119
D Caversham (Kidmore End Sch.)	T. F. Higgens, Esq.	5	1 0	309	..	29·91	183	128
D Harpsden (Cray) (+A)	B. E. Dunbar Kilburn, Esq.	5	1 0	230	..	27·01	180	133
D Henley-on-Thames (Hart St.)	A. Edward Hobbs, Esq.	5	1 6	110	..	28·42	169	128
D Henley-on-Thames (Greys Lane)	G. F. Smith, Esq.	5	1 0	123	..	28·39	154	128
D Henley-on-Thames (Greys Gr.)	Mrs. H. Wolferstan	5	2 0	350	..	29·48	193	123
D Wyfold (Neals Farm)	J. P. Lee, Esq.	5	0 9	540	..	31·30	183	135
D Ipsden (Hailey)	Glynne Williams, Esq.	5	1 0	350	..	26·29	186	126
D Nettlebed (Joyce Grove) No. 1	Mr. F. Morby	5	1 0	590	..	31·15	157	125
D Culham	F. Mitchell, Esq.	5	0 10	180	..	19·96	169	114
Culham (Zouch Farm)	P. E. Saunder, Esq.	5	1 3	186	..	19·69	..	..
D Clifton Hampden (Manor House)	Lord Aldenham	5	1 0	190	..	21·90	172	115
D Watlington (Pyrton Manor)	Major H. Ducat Hamersley	5	1 0	325	26·7	26·48	184	133
D Wheatfield	A. J. Spencer, Esq.	5	0 11	275	..	26·52	161	125
D Toot Baldon (Potlands)	D. Clinkard, Esq.	5	1 0	288	..	21·24	..	116
D Thame (Tythrop House)	A. A. H. Wykeham, Esq.	8	1 2	266	..	26·20	176	128
5.—OUSE. 25 sq. mi.								
NORTHAMPTONSHIRE (Area, 1003 sq. mi.)								
1.—SEVERN—Upper Avon. 60 sq. mi.								
Rugby (Kilsby Vicarage)	Rev. C. Ryder Macnally	5	0 10	470	..	27·82	204	146
Winwick Warren	Capt. P. L. Ransom	8	1 5	648	..	29·76	..	132
D Naseby Reservoir	T. W. Millner, Esq.	5	1 6	519	..	29·20	201	137
2.—THAMES—Cherwell. 77 sq. mi.								
D Croughton	C. A. St. George Moore, Esq.	5	1 0	430	..	25·93	181	131
d King's Sutton (Manor House)	G. Morgan, Esq.	5	1 0	338	..	29·13	..	..
D Eydon Hall	Mrs. Waldron	5	1 0	536	..	28·96	188	143
3.—OUSE. 148 sq. mi.								
d Brackley (Waterworks)	W. M. Oldreive, Esq.	5	1 2	471	..	27·88	..	126
D Brackley House	Major J. Allen	5	6 8	425	27·1	26·80	202	136
D Hazelborough Woods	Office of Woods	8	1 0	241	..	27·12	177	164
d Silverstone (Council Sch.)	J. P. Osborne, Esq.	5	1 0	400	..	27·48	..	..
D Towcester (Bradden House)	C. E. Grant-Ives, Esq.	5	0 10	420	..	28·13	180	130
D Towcester (Easton Neston)	Sir T. Fermor-Hesketh, Bt.	8	1 0	325	..	26·04	172	130
D Roade (Council School)	R. W. Janes, Esq.	8	1 0	394	..	24·83	151	124
d Hargrave Hall	Sir K. Murchison	5	1 0	273	..	25·28	..	..
4.—NENE. 622 sq. mi.								
D Salcey Forest	Office of Woods	8	1 3	370	..	31·41 ?	187	174
D Blisworth (Crieff House)	A. Westley, Esq.	5	1 0	351	26·3	25·73	190	125
D Blisworth (Grand Junc. Canal)	T. W. Millner, Esq.	5	1 6	300	..	25·98	191	130
D Castle Ashby	A. R. Searle, Esq.*	5	1 4	230	..	26·61	209	126
D Little Houghton House	Christopher Smyth, Esq.	5	2 3	270	..	24·75	174	123

* *Per* Northamptonshire Natural History Society.

DIVISION III.—SOUTH MIDLAND COUNTIES—(*con.*).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge Height of Rim above Ground.	Height of Ground above Sea Level.	Average Rainfall.	1928 Rainfall.	Days with ·01 in. or more.	Days with ·04 in. or more.
NORTHAMPTONSHIRE—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
4.—NENE—(*con.*)								
d Northampton (Upton)	J. R. Foster, Esq.	5	1 0	270	..	23·86	..	112
D Northampton (General Hosp.)	H. St. John Wood, Esq.	5	1 1	259	..	25·61	185	129
D Northampton (Mental Hosp.)	W. R. Budgen, Esq.*	8	1 2	398	..	24·65	184	122
D Northampton (Stimpson Av.)	F. Tomlinson, Esq., C.E.	8	19 0	329	..	25·47	165	119
D Northampton (Mercers Row)	R. H. Primavesi, Esq.	5	8 6	240	..	25·17	194	121
D Flore	Major C. A. Markham	5	1 0	344	..	27·78	180	129
D Duston (Southfield Road)	W. P. Walker, Esq.	5	1 0	342	..	25·75	182	132
D Wollaston	G. Harris, Esq.	5	2 0	250	..	23·71	178	119
D Daventry (Tunnel End)	T. W. Millner, Esq.	5	1 6	394	..	25·27	186	129
D Althorp Park	Mr. G. Low*	5	1 3	414	..	28·68	186	135
D Sywell Hall	Brig.-Gen. H. E. Stockdale	5	1 0	371	..	27·59	187	139
D Pitsford (Sedgebrook)	Major C. A. Markham	5	1 0	311	24·5	27·47	159	123
D Wellingborough (Swanspool)	R. S. Henshaw, Esq., C.E.	5	1 0	169	24·3	24·64	181	121
D Wellingborough (Sewage Works)	R. S. Henshaw, Esq., C.E.	5	1 0	139	..	23·39	176	124
D Wellingboro' (Bushfield W.W.)	R. S. Henshaw, Esq., C.E.	8	0 11	286	..	24·39	186	123
d Watford Court	Lord Henley*	9	1 2	380	..	27·61	..	114
D Ravensthorpe Reservoir	F. Tomlinson, Esq., C.E.	5	1 0	370	..	26·53	184	142
D Raunds (Day School)	The Head Master	5	1 0	214	23·5	19·83	162	112
d Lamport Hall Gardens	Mr. H. Tyrrell	8	1 0	440	..	30·01	..	131
D Kettering W.W. (Cransley)	Major J. P. Haugh	8	0 6	275	..	26·15	185	123
D Kettering (Sewage Works)	Major J. P. Haugh	8	0 11	199	..	24·82	180	125
D Kettering W.W. (Thorpe Malsor)	Major J. P. Haugh	5	0 11	352	..	27·21	202	142
D Kettering W.W. (Clover Hill)	Major J. P. Haugh	5	0 7	344	..	25·55	178	127
d Thrapston (Drayton House)	Mr. C. V. Craske	5	1 6	220	..	26·66	162	142
Rothwell (Loddington)	Mr. J. Oliff	5	1 0	400	..	26·56	160	..
d Thrapston (Islip)	G. E. Abbott, Esq.	5	..	145	..	21·22 ?	..	..
D Tichmarsh Rectory	Rev. Canon A. M. Luckock*	5	1 0	170	..	24·44	179	132
d Desborough Council School	Mr. F. W. Grudgings	5	1 0	400	..	28·21	177	113
D Rothwell (Shotwell Mill W.W.)	The Surveyor, U.D.C.	5	1 6	340	..	25·77	178	126
D Barnwell (Lilford Hall)	Mr. F. W. Gallop	5	1 0	..	..	25·37	173	127
d Oundle (Milton Road)	J. M. Siddons, Esq., C.E.	5	1 6	131	22·3	20·85	..	..
D Oundle School	A. Bond, Esq.	8	1 0	147	..	20·50	204	113
D Peterborough (Westbourne Ho.)	E. H. Colman, Esq.	5	1 0	35	..	21·47	179	111
D Peterborough (Abbeyfields)	Major J. Shipley Ellis	5	1 0	49	..	21·56	191	124
d Peterborough Park	W. H. A. Court, Esq., C.E.	5	0 11	45	..	20·82	..	..
D Peterborough (Milton Park)	Mr. W. D. Green*	..	..	83	..	22·41	175	128
D Wittering (Whitewater)	E. Betts, Esq.	8	1 0	241	..	24·04	160	119
D Wittering (Bone Mill)	E. Betts, Esq.	8	1 0	..	..	25·00	165	124
D Eye (Northolm)	S. M. Egar, Esq.	5	1 0	16	..	19·95	183	111
D Eye (Newborough)	R. Williams, Esq.	5	1 0	8	..	20·93	174	116
5.—WELLAND. 96 sq. mi.								
D Market Harboro' (Dingley Hall)	Mr. V. Read*	5	1 6	400	..	28·48	177	139
d Carlton Park Gardens	Mr. R. W. Thatcher	5	1 1	300	..	23·44	..	109
D Weston-by-Welland	Major N. H. Matthews	5	1 3	254	..	27·15	193	135
D Rockingham Castle Gardens	Mr. C. Mears	5	1 2	450	..	25·23	165	118
D Gretton School	W. Leeson, Esq.	5	1 6	365	..	25·26	181	129
d Easton-on-the-Hill	W. H. Tillson, Esq.	5	0 7	290	..	(23·38)	..	..
D Market Deeping (Etton)	W. H. A. Court, Esq., C.E.	8	1 0	25	..	20·82	165	118
HUNTINGDONSHIRE. (Area, 366 sq. mi.)								
1.—OUSE. 327 sq. mi.								
D St. Neots (Waresley Park)	Miss E. Duncombe	5	0 11	190	24·0	21·48	156	113
d Hemingford Grey	G. F. Wilson, Esq.	5	1 6	20	21·9	20·43	..	111
D Hemingford Grey School	W. T. Carter, Esq.	5	1 0	23	..	21·35	160	117

(66/91) * *Per* Northamptonshire Natural History Society. M

DIVISION III.—SOUTH MIDLAND COUNTIES—(*con.*).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge: Height of Rim above Ground.	Rain-gauge: Height of Ground above Sea Level.	Average Rainfall.	1928: Rainfall.	1928: Days with ·01 in. or more.	1928: Days with ·04 in. or more.
HUNTINGDONSHIRE—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
1.—OUSE—(*con.*).								
D Brampton (The Lilacs)	Rev. G. H. Raynor	5	1 0	45	22·3	22·01	153	117
D Huntingdon (Hinchingbrooke)	Mr. W. Prowting	5	2 0	70	22·4	22·34	178	121
D St. Ives (Slepe House)	Dr. W. R. Grove	5	1 0	25	22·6	20·88	152	109
D Catworth (School House)	J. H. Annet, Esq.	5	0 9	210	23·7	21·37	177	109
D Whittlesea Mere	L. I. Clark, Esq.	8	1 6	10	21·4	21·39	158	117
2.—NENE. 39 sq. mi.								
BEDFORDSHIRE. (Area, 467 sq. mi.)								
1.—THAMES—Colne. 20 sq. mi.								
Luton (Stockwood)	Capt. H. Crawley Ross-Skinner	5	1 0	539	..	26·38	166	134
2.—THAMES—Lea. 32 sq. mi.								
D Luton (Pumping Station)	J. W. Tomlinson, Esq., C.E.	5	1 0	343	25·9	25·62	171	126
Luton (The Larches)	J. W. Green, Esq.	5	1 0	400	..	25·70	..	..
D Luton (Wardown Park)	J. W. Tomlinson, Esq., C.E.	5	1 0	381	..	24·49	166	121
D Luton (The Downs)	G. W. Pryer, Esq.	5	1 0	479	..	26·05	161	127
3.—OUSE. 408 sq. mi.								
d Shefford (Stondon Manor)	R. Long, Esq.	5	1 0	241	..	23·25	..	115
D Hockliffe (Wistaria)	C. J. Kilby, Esq.	5	1 0	350	..	26·18	164	125
D Steppingley	E. Capel, Esq.	5	1 0	350	..	25·26	171	126
D Woburn (Experimental Farm)	Lawes Agricultural Trust.	8	1 0	291	23·9	26·08	198	129
D Woburn (Fruit Farm, Ridgmont)	E. J. Hobbs, Esq.	5	1 0	270	..	25·05	171	130
D Stotfold (Three Co. Mental Hos.)	Dr. L. O. Fuller	5	1 0	220	23·2	20·78	172	103
M Meppershall	K. R. Reynolds, Esq.	5	0 9	235	..	22·15	..	..
Shefford (Clifton Bury)	A. Inskip, Esq.	5	1 6	150	..	22·04	..	..
D Shefford Council School	G. F. Alldritt, Esq.	5	1 0	126	..	22·46	170	126
Shefford (Stanford)	H. Inskip, Esq.	5	1 0	90	..	22·08	..	..
D Biggleswade (New Spring P.S.)	T. A. Staniforth, Esq.	5	1 0	180	..	22·50	183	126
D Cardington (+A)	The Meteorological Office	8	0 10	137	..	19·78	165	109
D Sandy (The Lodge)	Mr. R. Pettifer	5	1 0	200	..	21·95	152	121
D Sandy (Mogerhanger Park)	Dr. C. G. Welch	..	..	..	..	21·86	166	128
D Sandy (Sewage Works)	C. M. Robinson, Esq.	5	1 0	72	..	19·75	170	116
D Bedford (Castle Road)	Miss M. E. Newbery	5	7 0	108	..	21·70	169	120
D Bedford (Kimbolton Road)	Dr. Kilham Roberts	5	1 0	118	..	22·26	174	119
D Bedford (Bedford Park)	N. Greenshields, Esq., C.E.	8	1 3	117	..	20·63	166	108
Goldington (Castle Mills)	W. H. Rogers, Esq.	5	1 4	90	..	19·50	..	..
D Great Barford House	J. Arnold Whitchurch, Esq.	5	1 0	120	..	20·19	162	111
Sharnbrook (Castle Close)	L. Stileman-Gibbard, Esq.	5	1 0	210	..	23·32	194	124
4.—NENE. 7 sq. mi.								
CAMBRIDGESHIRE. (Area, 859 sq. mi.)								
1.—STOUR. 17 sq. mi.								
2.—OUSE. 741 sq. mi.								
D Ashwell (Odsey)	Sir H. Geo. Fordham	5	1 0	256	23·0	22·77	184	123
Litlington Vicarage	Rev. M. de Courcy-Ireland.	8	1 0	120	..	20·89	..	..
D Bartlow (Castle Camps Sch.)	C. J. Keeble, Esq.	5	1 0	400	..	24·49	263	134
D Guilden Morden Vicarage	Rev. Ll. G. S. Price	5	1 0	140	21·9	22·30	167	125
Abington Pigotts Rectory	Rev. M. de Courcy-Ireland.	5	1 0	78	21·8	23·66	158	..
D Melbourn (Melbourn Bury)	A. R. Fordham, Esq.	5	1 0	100	..	22·18	181	125
D Meldreth (Chiswick Farm)	A. A. Howard, Esq.	5	1 1	70	22·4	23·12	189	125
D Fowlmere (Fruit Farm)	H. F. Smith, Esq.	5	1 0	66	19·9	18·59	154	100
d Foxton	P. Gifford, Esq.	5	1 0	60	23·1	20·71	..	..
d Whittlesford (Scotts)	Robert Maynard, Esq.	5	0 6	68	22·3	20·94	..	105
D Wimpole Hall	Mr. W. J. Snell	5	1 0	141	23·0	19·99	154	103

DIVISION III.—SOUTH MIDLAND COUNTIES—(*con.*).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge Height of Rim above Ground.	Rain-gauge Height of Ground above Sea Level.	Average Rainfall.	1928 Rainfall.	1928 Days with ·01 in. or more.	1928 Days with ·04 in. or more.
CAMBRIDGESHIRE—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
2.—OUSE—(*con.*).								
D Shelford (Stapleford House)	J. H. H. Linton, Esq.	5	2 3	64	22·3	21·79	152	117
D Balsham Rectory	Rev. H. J. E. Burrell	5	1 6	399	23·0	22·94	149	115
D West Wratting Hall	E. G. Gordon Frost, Esq.	5	1 0	350	..	23·66	165	121
Long Stow	S. Welsford Pain, Esq.	5	1 0	240	..	22·47	..	..
d Grantchester Mill	J. Nutter, Esq.	5	5 0	31	22·6	(21·17)	..	..
D Fulbourn (Fleam Dyke)	W. W. Gray, Esq., C.E.	5	1 0	99	21·0	20·37	162	108
D Fulbourn Pumping Station	W. W. Gray, Esq., C.E.	5	1 0	37	22·9	22·24	172	122
D Fulbourn (Cambridge Mental Hos.)	The Farm Bailiff	5	1 6	72	..	22·51	153	118
D CambridgeW.W. (Cherryhinton)	W. W. Gray, Esq., C.E.	5	1 0	35	21·6	19·28	145	103
Cambridge (Hills Road)	Smith Nutter, Esq.	8	0 10	45	23·8	23·57	198	133
D Cambridge(CorporationStoreYd)	G. W. Teasdale, Esq., C.E.	5	1 8	52	21·2	20·74	165	107
D Cambridge (Botanic Gardens)	F. G. Preston, Esq.	5	1 0	41	21·8	20·85	149	104
D Cambridge (Mount Pleasant)	Rev. W. Francis Hicks	5	1 6	45	..	21·19	166	113
D Cambridge(CorporationPpg.St.)	G. W. Teasdale Esq., C.E.	5	1 7	28	22·1	19·94	158	106
D Caxton	Dr. E. P. H. Dudley	5	1 0	170	23·3	22·21	144	116
D Quy Hall	T. Musgrave Francis, Esq.	5	0 9	23	..	23·06	171	125
D Boxworth (Manor House)	E. H. Thornhill, Esq.	5	1 0	76	23·4	24·73	205	110
D Swaffham Prior Vicarage	Rev. L. Fisher	5	1 0	44	21·3	21·94	158	117
D Oakington	A. H. V. Bloom, Esq.	5	1 1	27	..	21·81	..	..
D Burwell (Manor House)	R. Stephenson, Esq.	5	1 0	58	23·0	21·99	150	123
D Cottenham (Bernard House)	Miss K. Bull	5	1 6	30	22·1	22·55	173	114
D Conington (Conington Hall)	P. T. Gardner, Esq.	5	1 0	50	..	22·37	172	116
D Fordham (London House)	W. V. Bloom, Esq.	5	1 0	30	21·4	20·81	145	120
d Stretham Engine	Mr. J. Housley	9	4 9	13	21·2	21·79	..	106
D Stretham (Orchard House)	Miss Wright	8	4 6	42	22·0	20·50	163	110
d Chatteris (Holwood Farm)	Mr. J. W. Watson	5	1 0	11	22·3	20·81	..	..
D Littleport (Highfield House)	H. G. Martin, Esq.	8	2 7	67	21·3	20·61	159	117
D Chatteris (Aylesby House)	A. H. Ruston, Esq.	5	1 6	31	22·5	22·03	161	120
d Chatteris (The Priory)	H. F. Fryer, Esq.	5	1 0	32	22·6	20·42	..	110
D March	L. I. Clark, Esq.	9	2 0	10	22·8	24·92	146	136
Upwell (Marmont Priory Lock)	L. I. Clark, Esq.	8	1 1	..	20·6	21·30	..	..
3.—NENE. 101 sq. mi.								
D Stanground Sluice	L. I. Clark, Esq.	8	1 6	15	20·3	22·24	183	126
D Parson Drove (Clows Cross)	W. Kingston, Esq.	8	1 0	13	22·1	22·39	177	123
D Wisbech (Horticultural Sta.)	W. G. Kent, Esq.	5	1 0	10	..	24·28	178	123
D Wisbech (Queen's Road)	C. Dann, Esq.	5	10 0	10	26·3	23·09	187	125
d Wisbech (Tydd Manor)	A. H. Carter, Esq.	5	6 6	..	..	23·06	..	116

DIVISION IV.—EASTERN COUNTIES.

ESSEX. (Area, 1532 sq. mi.)

1.—THAMES.—Lea. 132 sq. mi.								
D West Ham (Abbey Mills)	London County Council	8	0 10	15	..	22·99	155	126
D Leyton (Sewage Works) (+A)	A. P. Howell, Esq., C.E.	5	3 0	22	..	25·03	169	130
D Leytonstone (High Road)	Miss G. Lister	5	1 0	100	..	26·91	207	129
D Lea Bridge (Waterworks)	Met. Water Board	8	0 6	23	..	22·54	150	121
D Walthamstow (Ferry Lane)	Met. Water Board	5	0 6	40	23·9	24·11	170	118
D Woodford (Haggar Lane)	Met. Water Board	8	0 8	176	..	24·30	162	122
D Buckhurst Hill Reservoir	Met. Water Board	8	1 6	275	..	25·50	170	124
D Buckhurst Hill (Ardmore)	Miss E. F. Howard	8	1 0	270	..	25·93	177	136
D Chingford (Crescent Road)	Miss M. L. Mathieson	5	0 10	200	..	25·48	172	122
D Chingford Mill	Met. Water Board	8	0 6	40	..	26·15	190	122
D Loughton (High Beech Res.)	Met. Water Board	8	1 0	376	..	27·64	174	128
D WalthamAbbey(RammeyMarsh)	Met. Water Board	8	1 0	60	..	23·89	178	121
D Waltham Abbey (Pumping Stn.)	Met. Water Board	8	1 3	66	..	23·19	158	118
d Waltham Abbey (Gunpr. Fact.)	The Superintendent	5	1 0	64	..	22·33	..	..
D Hatfield Broad Oak(Barrington)	A. H. Gosling, Esq.	5	0 10	300	..	24·58	167	121
Bishop Stortford (Hassobury)	Major W. S. Gosling	5	0 10	290	..	25·19	174	..
D Stansted (Birchalls)	Col. R. Egerton	5	1 0	290	..	28·06	180	149

DIVISION IV.—EASTERN COUNTIES—(*con.*).

STATIONS.	AUTHORITIES.	Rain-gauge Diam.	Height of Rim above Ground.	Height of Ground above Sea Level.	Average Rainfall.	1928 Rainfall.	Days with ·01 in. or more.	Days with ·04 in. or more.
ESSEX—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
1.—THAMES.—Lea.—(*con.*).								
D Elsenham (Gaunts End)	H. Cotterell, Esq.	5	1 0	363	24·6	25·70	183	133
Stansted (Hargrave Park)	Arthur Alder, Esq.	5	1 7	..	..	27·87	..	..
D Stansted (Bentfield Place)	L. D. Gosling, Esq.	5	0 9	300	..	26·53	178	138
2.—THAMES—Roding &c. 316 sq. mi.								
D Tilbury (Park View Observatory)	S. A. Hill-Willis, Esq. C.E.	5	1 0	6	..	24·87	159	117
d Grays (Stanley Road)	Engineer U.D.C.	5	3 3	21	..	22·80	..	106
D Grays Sewage Works	The Manager	8	1 0	9	..	28·31	185	135
D Rainham (Riverside Sew. Works)	H. E. Lightfoot, Esq., C.E.	8	1 3	5	..	22·47	154	117
D East Ham (Central Park)	Public Health Dept.	12	1 0	15	..	23·82	172	125
D East Ham Well	Met. Water Board	8	1 0	17	..	23·22	177	121
D Dagenham Sanatorium	The Medical Superintendent	5	1 0	18	..	23·17	167	127
d Forest Gate (Monega Road)	W. E. Golding, Esq.	5	0 11	20	..	23·02	(174)	(123)
D Ilford Sewage Works	J. Sandford, Esq.	5	1 1	31	..	21·74	144	116
D Leigh (Brick House)	Miss I. Bentall	5	0 10	136	..	24·07	142	117
D South Benfleet (Hillside Road)	H. A. Marshall, Esq.	5	1 0	55	..	26·88	175	139
w Vange Pumping Station	Southend Water Works Co.	5	1 0	43	..	24·68	..	..
w Pitsea Pumping Station	Southend Water Works Co.	5	1 0	28	..	25·30	..	..
D Horndon (Eastern Sew. Works)	W. J. Grant, Esq.	8	1 6	23	..	23·40	169	119
D Hornchurch	Surveyor, U.D.C.	8	1 8	46	..	23·80	171	126
D Wanstead (Red Bridge)	Met. Water Board	5	0 6	45	..	21·56	161	119
D Wanstead (Nightingale Farm)	J. J. Barker & Sons	5	1 6	27	..	24·92	163	126
D Havering-atte-Bower (Fernside)	Benjamin Smith, Esq.	5	1 0	94	..	28·62	203	144
D Theydon Bois (The Vicarage)	J. C. Hibbert, Esq.	5	0 10	..	..	26·56	181	130
d Ongar (Marden Ash)	Mrs. Calver	5	1 6	190	..	23·49	(176)	(123)
D North Weald (Canes)	H. W. Hart, Esq.	5	1 0	250	..	27·27	169	137
3.—CROUCH. 186 sq. mi.								
D Shoeburyness (New Ranges)	The Meteorological Office	8	1 0	11	18·9	21·51	171	109
D Southend (The Cliffs)	The Pier Master	8	1 0	90	19·7	23·52	185	122
D Southend (Kilworth Avenue)	H. J. G. Ralph, Esq.	8	1 0	78	..	24·50	181	130
D Southend (Waterworks)	Southend Water Works Co.	8	1 0	112	21·1	23·60	171	124
D Leigh Reservoirs	Southend Water Works Co.	5	1 0	177	..	25·63	146	123
D Great Wakering	The Meteorological Office	5	1 0	11	18·4	22·31	166	111
D Little Wakering Vicarage	Rev. B. S. Mercer	5	1 0	20	..	23·91	170	128
D Eastwood Pumping Station	Southend Water Works Co.	8	1 0	50	..	26·11	189	131
D Thundersley Reservoir	Southend Water Works Co.	5	1 0	277	..	25·71	172	131
w Nevendon Pumping Station	Southend Water Works Co.	5	1 0	43	..	24·72	..	..
D Billericay (Service Tank)	Southend Water Works Co.	5	1 0	310	..	22·95	170	123
D Billericay (Ramsden Hall)	T. W. Bacon, Esq.	5	0 9	260	..	27·83	184	138
d Wickford (Runwell Hall)	Miss A. Kemble	5	0 7	75	24·2	26·18	..	119
D Southminster (Dudswell)	Mrs. H. G. Owen	5	0 10	60	..	24·98	160	129
D Southminster (The New Moor)	E. J. Attenborough, Esq.	..	..	..	..	22·57	155	117
D Bradwell-on-Sea (Bradwell H.)	H. D. Chillingworth, Esq.	5	4 3	27	20·7	24·85	165	131
4.—BLACKWATER. 425 sq. mi.								
D Shenfield (The Lodge)	Harcourt P. Landon, Esq.	5	1 0	305	..	28·30	170	131
D South Hanningfield (Bearmains)	C. W. Gardner, Esq.	8	1 10	220	..	26·96	165	134
D Ingatestone (Fryerning)	A. E. Christy, Esq.	5	1 0	290	..	28·59	231	143
d Great Baddow	(R) S. L. Sams, Esq.	6	2 0	150	..	26·88	174	135
D Danbury Rectory	Rev. J. Bridges Plumptre	5	1 0	365	22·7	25·61	191	134
d Woodham Walter Lodge	H. H. Speakman, Esq.	5	1 6	137	..	24·33	..	..
Maldon	Town Clerk	5	1 0	14	..	(22·86)	..	..
D Writtle (Melbourne)	J. A. Rosling, Esq.	5	0 9	140	..	26·53	194	126
D Chelmsford (County Labor'tory)	D.B. Johnstone-Wallace, Esq.	5	1 0	134	22·3	25·21	152	121
D Chelmsford (High Street)	Miss F. J. Chancellor	8	1 6	98	22·5	25·49	180	127
D Witham (Wickham Hall)	D. B. Smith, Esq.	5	0 8	60	..	23·13	..	108
d Good Easter	East Anglian Inst. Agric.	5	1 0	185	..	23·41	162	120
D Pleshey Vicarage	Rev. C. H. B. Woodd, M.A.	8	1 3	200	..	24·40	172	127

DIVISION IV.—EASTERN COUNTIES—(*con.*).

	STATIONS.	AUTHORITIES.	Rain-gauge Diam.	Height of Rim above Ground.	Height of Ground above Sea Level.	Average Rainfall.	1928 Rainfall.	Days with ·01 in. or more.	Days with ·04 in. or more.
	ESSEX—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
	4.—BLACKWATER.—(*con.*).								
d	Tiptree (Brook House)	A. Hitchcock, Esq.	5	0 11	120	..	25·07	..	120
D	Witham (Faulkbourne Hall)	Miss C. L. Parker	5	0 8	100	..	24·72	173	119
D	Little Leighs (Lavender Leez)	W. C. Neild, Esq.	5	1 1	190	..	24·55	150	123
D	Kelvedon (Lawn House)	F. Randolph-Symmons, Esq.	5	1 0	96	..	26·89	177	134
D	Kelvedon (White Barn)	Messrs. W. & H. J. Sheldrake	5	1 5	135	..	25·28	164	128
D	Blacknotley (Lynderswood Ct.)	Sir J. G. Broodbank	5	3 6	245	..	24·56	157	123
D	Felsted School	E. H. Lockwood, Esq.	5	0 10	248	22·9	25·33	162	129
D	Great Dunmow	Messrs. Hasler & Co., Ltd.	5	1 0	200	..	24·92	170	128
D	Rayne (Staneway)	Mrs. Burt	5	1 1	247	..	24·85	154	124
d	Stisted (Milles Fm.)*	C. T. Richardson, Esq.	5	0 8	150	..	21·43	..	102
D	Great Saling (Woolpits)	Mrs. Joseph Smith	5	0 9	284	..	24·36	177	125
D	Shalford (Littles)	W. F. Hart, Esq.	5	1 0	280	..	24·62	158	124
D	Gt. Bardfield (South Lodge)	A. W. Brunwin, Esq.	5	1 0	250	..	24·36	179	125
	5.—COLNE & C. 283 sq. mi.								
D	Clacton-on-Sea	The Town Clerk	8	1 0	55	19·3	25·03	169	124
	Great Clacton (Clay Hall)	The late Philip Smith, Esq.	5	1 0	45	..	23·51	..	..
D	Walton-on-the-Naze	The Town Clerk	5	1 0	66	..	23·32	156	125
d	Colchester (King's Ford)	E. A. Digby, Esq.	5	0 10	103	..	24·54	..	116
d	Colchester (Maypole Farm)	R. P. Blyth, Esq.	5	1 0	112	..	25·44	191	124
D	Copford (The Grove)	Miss M. Harrison	8	1 0	190	..	26·50	162	124
d	Colchester (Hythe Gas Works)	Colchester Gas Co.	8	0 10	12	..	25·11	172	112
D	Colchester (Boro'Surveyor'sOff.)	H. Collins, Esq., C.E.	8	1 2	87	..	27·50	170	130
d	Colchester (Waterworks)	A. Hammond, Esq.	5	1 5	37	..	23·06	157	113
D	Lexden (Hill House, S. No. 2)	S. F. Hurnard, Esq.	5	1 0	90	..	24·35	163	114
d	Great Bromley (Broughton)	W. A. Roberts, Esq.	5	1 0	115	..	24·40	..	118
D	Earls Colne (Grammar School)	G. R. Hill, Esq.	5	1 0	168	..	22·69	154	113
	Earls Colne (Chalkney House)	H. F. Hills, Esq.	5	1 0	180	23·2	23·41	..	..
D	Earls Colne (Colne House)	Lieut.-Col. T. G.C.Reynolds	5	1 6	180	..	24·37	172	120
	Halstead (Attwoods)	R. E. Vaizey, Esq.	5	1 6	200	..	26·77	175	132
D	Halstead (The Brewery)	F. N. Adams, Esq.	5	1 0	139	..	24·49	154	117
d	Gt. Maplestead (Monk's Lodge)	Miss J. Miller	5	0 9	230	..	25·18	..	..
D	Great Yeldham Hall	G. A. Goodchild, Esq.	5	1 6	200	..	23·86	174	121
	6.—STOUR. 110 sq. mi.								
D	Dovercourt	The Borough Surveyor	5	1 0	47	..	24·12	162	122
D	Mistley (The Maltings)	Messrs. Brooks (Mistley), Ltd.	..	..	..	..	22·12	173	110
D	Sudbury (Bulmer Lodge)	Miss M. A. Burke	5	1 3	202	25·6	25·70	168	127
	7.—CUSE. 80 sq. mi.								
d	Widdington Rectory	Rev. Jas. W. Court	5	1 6	340	..	24·01	..	131
D	Great Chesterford Mills	E. H. King, Esq.	5	1 0	130	..	23·65	163	122
	SUFFOLK. (Area, 1489 sq. mi.)								
	1.—STOUR. 271 sq. mi.								
D	East Bergholt (Ackworth Ho.)	A. Harwood, Esq.	8	1 6	145	..	22·61	183	127
D	Capel St. Mary School	Bernard B. Taylor, Esq.	5	1 6	156	..	26·04	166	119
D	Assington Hall	Mr. F. J. Bullen	5	1 0	200	..	24·70	183	118
D	Great Cornard (The Limes)	E. Oliver, Esq.	5	0 9	85	..	23·29	159	113
D	Sudbury (Friars Street)	E. Ransom, Esq.	5	1 7	93	23·5	24·32	207	117
D	Hadleigh (Penlands)	E. A. Lee, Esq.	5	1 0	185	..	26·78	181	124
D	Waldingfield (Holbrook Hall)	Mrs. A. St. Leger Glyn	5	1 1	185	..	24·65	200	132
D	Hartest (Shimpling Hall)	E. D. Wolton, Esq.	5	1 0	200	..	20·78	150	108
D	Hawkedon Rectory	Rev. B. P. Oakes	5	3 4	303	25·0	26·16	187	122
D	Cockfield Rectory	Rev. Canon Edwin Hill	5	1 0	305	24·8	23·51	183	121
	2.—ORWELL. 166 sq. mi.								
D	Ipswich (Rookwd.,Copdock)(+A)	F. L. Bland, Esq.	8	1 0	164	..	25·77	171	121
D	Ipswich (Roundwood)	Alfred G. Glenn, Esq.	5	1 0	145	..	25·17	168	114

* Formerly at Pattiswick Hall (1 mile distant).

DIVISION IV.—EASTERN COUNTIES—(*con.*).

STATIONS.	AUTHORITIES.	Rain-gauge Diam.	Height of Rim above Ground.	Height of Ground above Sea Level.	Average Rainfall.	1928 Rainfall.	Days with ·01 in. or more.	Days with ·04 in. or more.
SUFFOLK—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
2.—ORWELL—(*con.*).								
d Ipswich (Museum)	F. M. Cullum, Esq.	8	0 10	73	..	25·37	..	..
D Ipswich (All Saints' Vic.)	Rev. S. C. Calver	5	1 5	..	..	24·84	179	117
D Ipswich (Dale Hall)	Percy Turner, Esq.	8	1 0	138	..	24·05	165	113
Elmsett (Laurel Cottage)	A. E. Ladbrook, Esq.	5	3 0	210	..	23·15	..	130
d Nettlestead (High Hall)	A. S. P. White Cooper, Esq.	5	1 6	236	..	22·93	..	114
d Coddenham (Shrubland Park)	Mr. A. C. Horton	5	1 6	162	..	23·76	..	117
D Stowmarket	Capt. F. Creagh-Osborne, C.B.	5	1 0	117	..	24·00	166	114
D Haughley (Haughley House)	Late Major S. H. Creagh	5	1 0	188	..	20·39	162	110
3.—DEBEN & C. 466 sq. mi.								
D Felixstowe Aerodrome (+A)	The Meteorological Office	8	1 0	15	..	21·30	167	116
D Waldringfield	Major B. R. M. Glossop	8	1 0	70	..	27·32	159	115
D Woodbridge Abbey	Col. R. J. Carthew	8	1 2	46	..	26·62	187	123
D Orford (The Gables)	Miss E. A. Rope	5	1 1	30	..	26·19	191	131
Melton (Greylands)	Miss Jervis-White-Jervis	5	1 6	50	..	25·86	..	130
D Melton (St. Audrey's Hospital)	A. F. Philpott, Esq.	8	1 2	74	..	25·74	172	117
D Melton (Bromeswell Rectory)	Rev. F. Shadwell	5	1 5	35	..	26·15	171	121
d Rendlesham Hall	Mr. H. Long	5	1 0	88	23·1	24·68	..	..
D Campsea Ashe (High House)	Viscount Ullswater, G.C.B.	8	2 6	60	..	24·82	166	127
Charsfield (Red House)	Hugh P. Youngman, Esq.	5	1 9	150	..	25·03	..	..
D Pettaugh†	W. B. Damant, Esq.	5	1 6	190	..	24·37	151	120
D Snape (Green Heys)	G. H. Garrett, Esq.	5	1 6	50	..	24·14	173	142
D Leiston (Lower Abbey)	Miss M. K. Rope	5	1 0	30	..	22·80	172	125
D Halesworth Rectory	Rev. H. C. Newbery	5	1 0	50	..	26·52	200	139
D Halesworth (Estate Office)	G. W. Stanford, Esq.	5	1 5	120	..	26·23	185	140
D Wangford (Ford House)	Hon. Agnes Eden	5	0 10	25	..	25·00	171	128
D Wrentham (Sotterley Hall)	F. W. C. Chartres, Esq.	8	1 0	70	..	25·02	177	127
4.—YARE & C. 208 sq. mi.								
D Horham Rectory	Rev. J. E. Soden	5	1 3	175	..	26·47	187	133
D Eye (Brome)	C. J. Barradell, Esq.	5	1 1	142	..	23·25	189	119
D Rumburgh Vicarage	Rev. W. Linton Wilson	5	1 0	148	..	23·19	192	124
D Bungay (Flixton Hall)	Sir Shafto Adair, Bart.	5	1 0	79	..	22·48	176	122
D Lowestoft (Belle Vue Park)	R. Robertson, Esq.	5	1 0	83	23·5	22·06	175	122
D Lowestoft (Briar Clyffe)	H. Hollingsworth, Esq.	..	..	..	..	23·01	161	120
D Herringfleet House	G. H. Wyllys, Esq.	5	0 8	55	..	24·86	201	129
D Lound Pumping Station	Lowestoft Water & Gas Co.	8	1 0	34	..	24·50	170	135
D Hopton (Hopton House)	C. S. Orde, Esq.	5	1 0	..	..	24·31	174	128
D Fritton Warren	Major-Gen. R. Upcher, D.S.O.	5	1 0	42	..	25·84	179	129
D Fritton Hall	Major A. R. Buxton	8	0 10	40	..	25·84	217	140
D Yarmouth (Burgh Hall)	H. P. Frederick, Esq.	5	0 10	45	24·4	24·26	186	133
5.—OUSE. 378 sq. mi.								
d Newmarket (Sewage Outfall)	W. H. Eley, Esq., C.E.	5	1 0	81	..	25·13	..	112
D BurySt.Edmunds (NorthgateSt.)	Rev. J. S. Pratt	5	1 0	100	..	23·22	186	122
Bury St. Edmunds (Westley H.)	Mrs. Burrell	5	1 6	226	25·1	25·90	..	131
d Bury St. Edmunds (Beet Sugar Factory)	United Sugar Co., Ltd.	5	0 6	160	..	(22·30)	..	..
D Fornham St. Martin Rectory	Rev. H. Buckton	5	1 0	125	..	20·41	154	114
d Hengrave Hall	Sir John Wood, Bart.	5	1 5	85	23·1	21·84	..	108
D Bury St.Edmunds (TrostonHall)	F S. Beauford, Esq.	5	1 0	130	..	22·64	176	113
D Mildenhall	H. R. W. Forster, Esq.	5	1 3	50	..	21·76	181	124
Barningham (The Beeches)	Miss A. K. Lingwood	5	0 9	136	..	23·99	..	..
D Elveden Hall	The Earl of Iveagh, C. B.	5	1 0	130	..	24·76	211	126

† Formerly called Helmingham (Bocking Hall).

DIVISION IV.—EASTERN COUNTIES—(*con.*).

	STATIONS.	AUTHORITIES.	Rain-gauge Diam.	Height of Rim above Ground.	Height of Ground above Sea Level.	Average Rainfall.	1928 Rainfall.	Days with .01 in. or more.	Days with .04 in. or more.
	NORFOLK—(Area, 2044 sq. mi.)		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
	1.—YARE. 658 sq. mi.								
D	Diss (The Cedars)	Dr. H. M. Speirs	5	0 8	108	..	23·39	174	120
D	Diss (Walcot House)	Mrs. H. L. R. Moore	5	0 8	108	..	26·64	192	133
D	Pulham St. Mary (Hill House)	W. G. Rutter, Esq.	5	1 0	120	24·7	26·52	211	152
D	Denton Rectory	Rev. Canon T. H. Bindley	5	0 10	50	23·4	26·56	203	137
D	Ditchingham	W. G. Rutter, Esq.	5	1 0	25	23·9	21·59	216	121
D	Beccles (Raveningham Hall)	N. H. Bacon, Esq.	8	1 0	60	24·6	26·10	164	128
D	Hapton Parsonage	Lt.-Col. H. C. Copeman	5	1 5	120	..	23·63	179	138
D	Spooner Row (Wattlefield Hall)	E. F. Routh Clarke, Esq.	5	1 0	165	..	24·99	181	136
D	Lodden (Chedgrave Manor)	C. E. Dupuis, Esq.	5	1 6	17	24·2	23·00	176	126
D	Wymondham (Morley School)	T. E. Ormond, Esq.	5	1 0	152	25·3	25·37	228	138
D	Wymondham	J. B. Pomeroy, Esq.	8	1 3	118	..	23·67	180	129
D	Hingham	F. B. Law, Esq.	5	1 0	193	25·1	25·92	186	140
D	Keswick Old Hall	E. Knight, Esq.	5	1 0	90	26·4	25·87	205	146
D	Gorleston Coastguard Station	The Meteorological Office	8	1 0	16	23·3	23·41	181	126
D	Norwich (Claremont Road)	W. S. Tillett, Esq.	8	1 0	100	..	25·55	222	145
D	Norwich (Eaton)	A. W. Preston, Esq.	5	1 0	98	26·5	26·41	212	141
D	Norwich (Carrow Abbey Gar.)	The Misses Colman	5	1 0	35	25·2	25·29	191	143
D	Norwich (Ipswich Road)	J. H. Willis, Esq.	5	1 0	110	..	25·16	209	144
D	Norwich (Heigham Cemetery)	L. Alan Jewell, Esq.	5	1 0	37	25·5	25·72	199	145
d	Thorpe St. Andrew (Pine Banks)	J. Jarrold, Esq.*	5	1 0	155	..	(23·66)	..	..
	Norwich (Marlingford Hall)	Major E. H. Evans-Lombe	5	2 0	50	26·9	27·61	194	..
D	Sprowston (Oak Lodge)	A. Cozens Hardy, Esq.*	5	1 0	100	25·2	25·00	215	136
d	Drayton Hall	C. H. Walter, Esq.	5	1 0	..	26·0	23·81	..	117
D	Swanton Morley Rectory	Rev. R. N. Usher	5	1 0	105	24·3	25·81	176	142
D	Bylaugh Park	Mrs. Rice	5	1 0	..	24·8	26·02	189	148
D	Swanington (Heath House)	P. Norgate, Esq.	5	1 3	101	25·6	24·81	220	140
D	East Bilney Hall	K. W. Hervey, Esq.*	5	4 0	140	26·6	26·57	184	140
D	Cawston Rectory	Rev. T. H. Marsh	5	1 0	120	26·6	27·70	221	147
	2.—YARE—Bure & c. 368 sq. mi.								
D	Acle	Miss Davie*	5	0 6	51	25·1	24·26	201	130
D	Sprowston (The Church Farm)	H. B. Cowell, Esq.	5	1 0	93	..	24·38	160	126
D	Yarmouth (Ormesby St. Michael)	Gt. Yarmouth W. W. Co.	8	1 0	22	26·2	23·52	196	125
D	Coltishall (Manor House)	F. A. Bainbridge, Esq.	5	0 11	20	25·5	24·11	181	138
D	Wroxham (Hoveton Hall)	G. F. Buxton, Esq., C.B.	5	1 0	25	26·5	25·47	207	144
D	Barton Turf Hall	J. M. Wood, Esq.	8	0 10	40	..	21·06	164	111
D	Aylsham (Rippon Hall)	Major H. S. Marsham	5	0 7	90	26·4	26·11	160	136
d	Worstead (Dilham)	Rev. J. A. Laurence*	5	0 8	25	26·3	(25·76)	..	..
D	Worstead (Lyngate Cottage) (+A)	Miss F. E. Hooper	8	1 3	55	26·5	23·38	196	129
D	Aylsham (Woodgate House)	Lt.-Col. T. W. Purdy	5	1 0	100	27·2	23·63	186	145
	Hindolveston (School House)	Owen Potter, Esq.	5	1 0	200	..	26·26	..	..
D	Colby School	John Blott, Esq.	5	1 0	50	..	26·23	200	151
D	Walcott-on-Sea	Lt.-Col. R. S. Hunt, D.S.O.	5	1 0	20	..	22·05	173	130
D	Swafield Rectory	Rev. H. Muir	5	0 10	100	25·5	23·09	184	129
	North Walsham (Gunton Park)	Lord Suffield	8	1 3	105	25·9	24·64	..	..
D	Cromer (Northrepps Hall)	Lt.-Col. C. R. Gurney	5	1 2	225	26·7	25·76	192	145
D	Hanworth Rectory	Rev. Wilson W. White	5	0 10	..	..	24·55	179	142
	3.—STIFFKEYS & C. 290 sq. mi.								
D	Sandringham House Gardens	Mr. T. H. Cook	5	0 9	121	27·0	27·14	208	144
D	Syderstone (The Rectory)	Rev. B. D. Reed	5	1 0	210	..	25·25	192	137
D	Walsingham	Rev. Canon J. Blake-Humfrey	5	0 10	54	25·9	28·78	210	153
D	Cromer (The Warren)	F. H. Barclay, Esq.	5	1 0	101	24·1	24·96	162	139
D	Cromer (Gas Works)	Cromer U.D.C.	5	1 0	196	24·4	23·31	180	123
D	Wells (Holkham Park)	Earl of Leicester, G.C.V.O.	5	1 0	180	..	26·44	181	146
D	Langham Episcopi Vicarage	Rev. John H. Toy*	5	0 6	139	23·2	22·76	192	131
D	Sheringham Hall	Miss E. Upcher	5	0 10	130	23·6	22·07	172	118
D	Sheringham (Skelding)	F. Hall Smith, Esq.	8	1 0	70	..	25·19	208	136
D	Wells (Holkham Hall)	Earl of Leicester, G.C.V.O.	5	1 0	43	23·1	23·61	165	121
D	Blakeney	Mr. R. Lee	5	1 3	29	23·0	23·21	196	116
D	Hunstanton	H. B. Belding, Esq.	5	1 1	105	..	21·68	175	122

* *Per* Norfolk Rainfall Organisation.

DIVISION IV.—EASTERN COUNTIES—(*con.*).

	STATIONS.	AUTHORITIES.	Diam.	Rain-gauge Height of Rim above Ground.	Rain-gauge Height of Ground above Sea Level.	Average Rainfall.	1928 Rainfall.	1928 Days with ·01 in. or more.	1928 Days with ·04 in. or more.
	NORFOLK.—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
	4.—OUSE & C. 709 sq. mi.								
D	Garboldisham Manor	Major E. W. Denny, D.S.O.	8	1 0	70	23·2	23·18	179	129
d	Thetford (Ford Street Gdns.)	Mr. A. Pipe	5	1 0	44	23·4	24·77	..	114
D	Thetford (Kilverstone Hall)	Baron Fisher of Kilverstone	8	1 0	70	21·7	24·80	178	128
D	Thetford (Waterworks)	E. S. Greenwood, Esq.	8	1 0	165	23·8	26·07	191	138
D	Attleborough (Quidenham Hall)	Earl of Albemarle	5	1 0	100	24·1	24·21	239	118
D	Hargham Hall	Sir H.R.Beevor, Bart.,M.D.	5	0 6	100	24·9	24·72	181	131
d	Methwold (Dyke House)	Earl Russell	5	1 0	20	..	(24·50)	..	..
	Mundford (Lynford)	T. P. Godfrey, Esq.	5	1 0	80	..	24·67	..	..
D	Caston (Flaxmoor)	Lt.-Col. T. S. N. Hardinge	5	1 1	150	..	24·52	208	133
	Watton	A. A. Gompertz, Esq.	5	1 0	166	25·7	26·41	177	134
d	Great Cressingham	J. W. Montgomery, Esq.	5	1 0	90	..	25·02	(182)	(133)
D	Downham (Dial House)	Messrs. T. H. Wenn & Co.	5	1 6	..	..	22·43	159	118
D	Downham (High Street)	J. M. Jackson, Esq.	5	1 6	16	..	22·09	162	128
d	Outwell (Well Creek Sluice)	L. I. Clark, Esq.	8	2 6	16	22·0	22·04	..	110
d	Wallington Hall	J. L. Luddington, Esq.	5	0 6	58	23·7	24·27	..	116
D	Swaffham (The Villa)	Mr. R. Hudson	5	0 9	246	26·3	27·61	186	132
d	Swaffham	Messrs. Vynne & Everett, Ltd.	5	2 7	210	..	27·70	..	125
D	Sporle	T. S. Matthews, Esq.	5	4 0	230	..	27·32	212	144
D	Little Dunham (Dunham Cott.)	A. G. Copeman, Esq.	5	1 0	270	27·2	29·50	203	145
	Great Dunham (The Rectory)	Rev. E. C. S. Upcher	5	2 1	310	26·5	27·44	203	147
D	Wiggenhall(St.GermansSluice)	L. I. Clark, Esq.	8	1 6	..	23·1	25·80	169	143
d	East Winch (Holland House)	J. C. Cottam, Esq.	5	1 6	55	23·3	24·85	(180)	(137)
d	King's Lynn (Manure Works)	J. Brown, Esq.	5	1 2	10	..	23·56	..	110
D	Tittleshall	Capt. H. J. Buxton	5	1 6	285	26·8	26·25	173	144
d	Grimston (School House)	J. R. Steward, Esq.	5	1 2	75	..	25·17	..	137
	5.—NENE. 19 sq. mi.								
D	Emneth (Inglethorpe Manor)	F. M. Bland, Esq.	5	1 0	6	22·4	23·66	172	129

DIVISION V.—SOUTH WESTERN COUNTIES.

WILTSHIRE. (Area, 1375 sq. mi.)

	1.—LOWER AVON. 386 sq. mi.								
D	Westbury (Cambridge House)	Dr. W. K. A. Richards	5	1 0	190	..	32·51	178	139
D	Westbury (The Vicarage)	K. E. Alexander, Esq.	5	1 0	181	..	32·42	185	135
D	Market Lavington (Old House)	Miss A. Pleydell Bouverie.	5	0 9	290	29·0	30·03	187	137
D	Gt. Cheverell (Timoleague)	Rev. H. S. Travers	5	0 6	380	..	30·15	140	123
D	Trowbridge (Rood Ashton)	Mr. W. Strugnell	8	1 6	250	32·2	36·61	179	140
D	Trowbridge (Town Hall)	The Engineer	8	1 2	131	..	28·33	175	129
D	Bradford (Woodleigh)	A. Scratton, Esq.	5	1 8	226	31·7	34·54	180	149
D	Bradford (Winsley Manor)	E. W. Knatchbull, Esq.	5	0 6	400	29·9	33·90	190	141
D	Bradford (Manvers House)	Dr. C. E. S. Flemming	5	1 6	130	29·9	32·65	185	136
D	Seend (Cleeve House) (R)	Lt.-Col. W. C. Heward Bell	8	1 0	160	27·5	30·22	202	140
D	Seend (Manor Cottage)	Rev. E. Seymour Awdry	5	1 6	305	24·8	26·10?	191	137
D	Holt (The Retreat)	A. V. H. Beaven, Esq.	5	1 0	145	30·3	31·90	180	138
d	Devizes(Wilts Co.Mental Hospl.)	Dr. S. J. Cole	8	2 3	385	28·0	27·64	..	..
d	Devizes (Broadleas)	W. H. L. Ewart, Esq.	5	1 0	400	..	28·74	..	..
D	Devizes (Highclere)	H. W. Green, Esq.	5	1 6	450	28·8	30·21	184	141
D	Great Chalfield	Major R. F. Fuller	5	1 2	165	28·6	32·32	181	135
D	Little Chalfield	Mrs. T. H. Baker	5	1 0	180	..	33·27	207	140
D	Calne (High Street)	E. W. Brown, Esq.	5	1 0	242	28·9	34·17	179	147

DIVISION V.—SOUTH WESTERN COUNTIES—(*con.*)

STATIONS.	AUTHORITIES.	Rain-gauge Diam.	Height of Rim above Ground.	Height of Ground above Sea Level.	Average Rainfall.	1928 Rainfall.	Days with ·01 in. or more.	Days with ·04 in. or more.
WILTSHIRE—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
1.—LOWER AVON—(*con.*).								
D Calne (Compton Bassett Gdns.)	Mr. H. Welch	5	0 10	384	30·7	33·52	176	150
D Chippenham (Rowden Hill)	Miss A. M. Collen	5	1 4	223	30·7	36·12	185	152
Chippenham (Kington Langley)	Mrs. Charles Garnett	8	1 0	172	..	34·80	..	..
D Wroughton (Basset Down Ho.)	Mrs. Arnold Forster	5	1 0	500	29·8	33·48	173	139
w Luckington Court	Lt.-Col. A. Johnson-Ferguson	5	0 8	400	30·2	32·43	..	..
D Malmesbury (Burton Hill Ho.)	H. L. Storey, Esq.	8	6 6	250	..	30·78	204	142
D Malmesbury (Lea House)	Rev. H. Milnes-Walker	5	1 6	260	..	31·19	169	138
D Malmesbury (Easton Grey)	Mr. P. A. Day	5	0 9	355	..	34·42	160	138
2.—STOUR. 33 sq. mi.								
D Mere (Charnage)	A. R. White, Esq.	5	1 0	426	33·8	34·56	213	156
D Stourhead	Sir H. H. A. Hoare, Bart.	5	1 0	583	38·1	38·23	165	143
Kilmington Rectory	Rev. H. G. Fox-Strangways	5	1 6	710	39·8	45·97	239	168
3.—EAST AVON. 554 sq. mi.								
D Longford Castle Gardens	The Earl of Radnor	5	1 0	139	31·4	34·56	183	133
D Fonthill House Gardens	Hugh Morrison, Esq., M.P.	5	1 0	400	37·8	41·35	202	148
D Salisbury (Sewage Works)	W. J. Goodwin, Esq., C.E.	5	2 2	153	29·7	30·80	180	133
D Salisbury (Manor Road)	Miss L. C. D. Awdry	5	1 0	250	29·2	33·94	191	149
D Salisbury (Atherton House)	Wilfrid Fletcher, Esq.	5	1 0	250	30·4	32·67	205	134
d Salisbury (Newlands)	Dr. T. W. Newton Dunn	5	1 0	175	..	(32·07)	..	(132)
D Stratford-sub-Castle (Manor Ho.)	Miss F. Carpenter	5	0 9	168	28·3	32·80	190	139
D Woodford Vicarage	Rev. M. I. Holme	5	0 10	200	..	33·51	211	137
D Porton (W.D. Experimental Stn.) (†A)	Meteorological Office	5	1 0	363	27·8	30·56	181	132
D Steeple Langford (Woodstock)	Miss A. J. Powell	5	1 1	257	..	34·09	192	140
D Wylye Rectory	Rev. E. Montagu Parken	5	1 8	246	30·6	32·88	175	140
D Maiden Bradley	The Duke of Somerset	5	1 6	600	38·4	42·34	164	155
d Maiden Bradley	R. Luff, Esq.†	..	..	650	..	41·12	..	..
d Sutton Veny (Greenhill)	Major R. Basil Hoare	5	1 3	300	34·0	(37·77)	..	..
D Heytesbury	Dr. Hammond T. Hinton	5	1 0	300	31·7	35·18	196	150
D Larkhill (Sch. of Artillery)	The Meteorological Office	8	1 0	440	26·5	26·19	178	129
D Warminster (Smallbrook Ho.)	G. E. Vicary, Esq.	5	0 8	420	..	35·80	192	147
D Orcheston St. Mary Vicarage	Rev. S. C. Winterton	5	0 9	285	..	29·67	174	131
d Chirton School*	C. Brown, Esq.	5	3 0	374	30·0	28·79	..	124
d Marlborough (Wilcot Manor)	Lady Ernest St. Maur	5	1 0	..	..	23·91	..	..
D Bishops Cannings Vicarage	A. J. Combes, Esq.	5	1 0	446	30·3	31·96	207	153
4.—TEST. 77 sq. mi.								
D Landford (Northlands)	Cedric R. Boult, Esq.	5	1 0	180	30·7	35·73	178	140
D Redlynch Grange	Maj. E. Fitz-Herbert Wright	5	1 2	300	..	36·62	197	139
d Ludgershall (Conholt Park) (R)	E. A. Wigan, Esq.	8	1 0	800	33·9	31·28	..	117
5.—THAMES—Kennet. 169 sq. mi.								
D Bishops Cannings (Shepherds Shore)	W. J. Rendell-Baker, Esq.	8	2 1	564	..	32·38	177	141
D Marlborough College	W. F. Harling, Esq.	5	1 0	424	31·1	33·22	186	135
Marlborough (Salisbury Road)	E. Kinder, Esq.	5	1 4	450	..	32·90	..	..
Aldbourne (Upham House)	Lady Currie	5	1 2	580	..	35·32	172	143

*Formerly Chirton Old Manor Farm.

†Per Mid-Wessex Rainfall Association.

DIVISION V.—SOUTH WESTERN COUNTIES—(*con.*).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge Height of Rim above Ground.	Rain-gauge Height of Ground above Sea Level.	Average Rainfall.	1928 Rainfall.	1928 Days with ·01 in. or more.	1928 Days with ·04 in. or more.
WILTSHIRE—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
6.—THAMES—Cole & c. 156 sq. mi.								
d Chiseldon Vicarage	Mrs. W. L. Waugh	5	1 2	550	..	31·49	..	..
D Wroughton (Swindon W. W.)	J.B.L.Thompson, Esq.,C.E.	8	1 2	448	..	31·03	184	141
D Chiseldon (Hodson House)	A. Ashford, Esq.	5	0 9	560	29·0	31·68	178	136
D Swindon (Town Gardens)	J.B.L. Thompson, Esq., C.E.	8	1 4	471	27·5	30·03	183	130
D Purton (Restrop House)	Col. A. Canning	5	1 3	444	27·7	29·40	180	120
DORSETSHIRE. (Area, 988 sq. mi.)								
1.—PARRETT. 61 sq. mi.								
D Evershot (Melbury House)	Mr. W. G. Lee	5	2 0	460	38·7	45·85	192	151
D Chedington Court	Sir Henry Peto, Bart.	8	1 0	605	38·5	39·83	187	143
D Leigh Vicarage	Rev. T. L. Jenkins	5	0 6	300	36·9	40·71	181	148
D Sherborne (St. Edmunds)	C. T. Hooper, Esq.	5	3 2	200	..	32·64	221	146
D Sherborne Castle	Mr. Edwin Hill	5	1 0	195	32·5	33·08	196	144
Sherborne (Castleton)	Reading T. Grantham, Esq.	5	1 6	220	31·8	34·29	..	..
2.—AXE. 25 sq. mi.								
d Broadwindsor (Blackdown Ho.)	C. E. M. Pinney, Esq.	5	0 9	515	40·8	(42·99)	..	..
D Forde Abbey	G. D. Roper, Esq.	5	0 10	220	37·7	40·50	176	136
3.—FROME & C. 502 sq. mi.								
D Portland Bill (New Lighthouse)	The Meteorological Office..	8	1 0	32	25·2	28·78	144	126
d Portland (H.M. Naval Depot)	The Works Officer	8	1 6	25	..	35·32	175	136
Weymouth (Westham)	G. Nicolson, Esq.	5	1 0	20	28·0	34·61	191	139
D Weymouth (Springfield)	Major J. H. C. Devenish ..	5	1 3	96	27·9	34·92	207	142
D Swanage	W. Wright, Esq.	5	1 0	40	..	34·11	181	129
D Chickerell (Montevideo)	Mrs.N.M.Richardson,O.B.E.	5	1 0	100	28·9	34·69	228	147
Tyneham House	Mrs. W. H. Bond	8	1 6	255	32·8	38·95	171	137
D Corfe Castle (Bucknowle House)	C. Waterston, Esq	5	1 5	170	31·0	36·25	162	115
D Steeple (Manor House)	Major F. H. Swann	5	0 8	231	34·8	41·05	165	141
D Creech Grange	J. W. G. Bond, Esq, C.B...	5	1 0	241	37·7	43·04	168	141
D Langton Herring (The Manor)	E. A. Sparks, Esq.	5	1 0	120	..	35·41	185	140
D Rodden (Rodden House)	A. H. White, Esq.	5	1 0	85	29·8	37·11	193	140
D Abbotsbury (West Street)	J. C. P. White, Esq.	5	1 6	147	29·2	37·51	172	146
D Upwey (Friar Waddon)	R. Davison, Esq.	5	1 0	215	..	38·65	161	138
D Upwey (Higher Well)	R. Davison, Esq.	5	1 0	289	..	37·33	161	130
D Wareham (East Holme)	Miss L. S. Bond	5	1 0	23	33·9	39·59	172	141
D Wareham (Binnegar Hall)	Mr. J. W. Hayward	5	1 0	65	33·8	40·27	188	142
D Wareham (Stockford)	W. Bond, Esq.	8	0 11	65	33·4	40·38	201	141
D Wareham (Trigon)	Mrs. L. Sturdy	8	1 4	60	32·1	40·25	173	133
D Broadmayne (Charlmont House)	W. R. G. Bond, Esq.	5	1 0	200	..	44·10	211	154
D Dorchester (Lewell Lodge)	E. R. Sykes, Esq.	5	2 4	230	..	39·98	193	148
D Dorchester (Kingscote)	E. A. Ffooks, Esq.	5	1 0	226	34·5	45·97	198	150
D Dorchester Waterworks	H. D. Strange, Esq.	8	1 0	310	..	41·77	189	141
D Dorchester (Wollaston House)	Capt. J. E. Acland	5	1 0	200	37·0	42·40	184	139
D Dorchester (Stinsford)	J. Wyndham Hull, Esq. ..	5	0 10	207	37·4	43·69	191	136
Dorchester (BirkinHouse)	Col.W.H.F.Weber,C.M.G.,D.S.O.	5	1 0	230	37·4	44·25	190	139
D HoltonHeath	(R.N.CorditeFac.) The Superintendent	8	1 0	64	29·9	35·03	172	121
D Parkstone (Firgrove)	F. R. Wadman, Esq.	5	1 0	175	28·6	33·66	187	135
D Parkstone (Parkside Road)	H. Blanchard, Esq.	8	1 3	150	..	35·05	187	128
D Parkstone (St. Osmund's Road)	A. D. Stables, Esq.	5	1 3	60	32·2	38·81	172	136
D Parkstone (The Laurels)	J. N. Blanchard, Esq.	5	1 2	115	..	34·68	181	130
D Branksome (Bourne Valley)	P. G. G. Moon, Esq.	8	1 3	84	30·0	34·04	174	135
D Branksome (Alderney Res.)	P. G. G. Moon, Esq.	8	1 3	213	..	37·92	185	138
D Broadstone (Sewage Works)	T. Wicks, Esq.	5	1 0	26	29·2	35·83	176	128
D Lyme Regis (Horn Bridge)	E. T. Stoward, Esq.	5	1 0	83	33·2	36·68	188	145
D Lyme Regis (Rotherfield)	Rev. E. J. Synge	5	1 0	145	34·3	38·16	210	149

DIVISION V.—SOUTH WESTERN COUNTIES—(*con.*).

STATIONS.	AUTHORITIES.	Rain-gauge Diam.	Height of Rim above Ground.	Height of Ground above Sea Level.	Average Rainfall.	1928 Rainfall.	Days with ·01 in. or more.	Days with ·04 in. or more.
DORSETSHIRE—(*con.*).								
3.—FROME & C.—(*con.*).								
D Lyme Regis (Overton)	C. Wanklyn, Esq.	5	0 10	400	30·9	36·67	218	148
D Lyme Regis (Highcliff)	Miss G. Lister	5	1 3	330	30·5	36·82	174	139
d Bridport (Coneygar)	H. Gordon, Esq., C.E.	5	1 0	110	32·9	33·85	(185)	(142)
D Bridport (Symondsbury)	P. G. Fry, Esq.	5	1 0	200	..	35·49	207	150
D Tolpuddle Parsonage	Rev. Harold R. Long	5	1 0	100	32·9	38·90	189	146
D Puddletown Vicarage	Rev. A. L. Helps	5	4 6	195	35·8	43·72	186	141
D Bere Regis (Barrow Hill)	A. E. Lucas, Esq.	5	1 0	120	32·9	36·81	175	131
D Bere Regis (Bloxworth House)	F. G. A. Lane, Esq.	5	1 6	118	33·7	41·17	180	136
D Broadstone (Grange Road)	E. Nimmo, Esq.	5	1 0	160	..	36·66	186	135
D Wynford House	Lt.-Col. Lord Wynford, D.S.O.	5	1 0	410	43·5	50·80	221	166
D Netherbury (The Chantry)	H. L. Kitson, Esq.	5	1 0	150	35·2	39·03	189	143
D Milton Abbas (Milton Abbey)	Mr. C. H. Perkins	5	0 10	333	..	47·29	210	135
D Beaminster (Hamilton Lodge)	Fiennes Trotman, Esq.	5	1 0	210	37·6	40·57	207	146
4.—STOUR. 388 sq. mi.								
D Kinson (Eglinton)	W. C. Keevil, Esq.	5	1 6	45	33·2	38·94	194	133
D Wimborne (CorfeMullen W.W.)	G. V. Sparrow, Esq., C.E.	5	1 0	81	32·9	39·47	166	130
D Wimborne (CorfeMullen, For. Hill)	E. Philip Belben, Esq.	8	1 0	300	32·5	42·03	186	152
D Winterbourne Whitchurch Vic.	Rev. H. H. Tilney Bassett	8	1 0	240	35·8	40·44	177	144
D SturminsterMarshall (BailieHo.)	Rev. J. Cross	5	1 0	85	32·6	38·39	184	133
D Wimborne (Stapehill)	W. J. Marchant, Esq.	5	1 0	95	..	37·08	170	142
D Wimborne (Melbury Lodge)	Rev. W. S. Clark	5	1 6	115	..	39·76	184	139
D Wimborne (Codford House)	G.H.Batterbury, Esq., M.D.	5	0 9	69	34·5	39·27	212	132
D Wimborne (Glen Ashton)	H. H. Haines, Esq.	5	0 10	150	..	37·83	189	132
D Blandford (Field's Oak)	H. S. Woodhouse, Esq.	5	1 0	..	34·4	37·95	190	140
Blandford (White Cliff St.)	E. Westcott, Esq.	5	1 0	70	..	40·63	189	144
D Blandford (King's Road)	D. Blanchard, Esq.	5	1 0	195	..	38·65	182	140
D Blandford (Bryanston Gardens)	Mr. J. Jaques	5	1 0	185	39·9	43·07	170	151
D Glanville Wootton (Manor Ho.)	H. B. Debenham, Esq.	5	0 9	350	35·2	37·30	193	144
D Holwell (Westrow House)	W. Warry, Esq.	5	1 0	252	34·4	33·44	174	141
D WimborneSt.Giles (St.Giles Ho.)	TheEarlofShaftesbury, K.P.	5	1 6	165	33·4	38·93	190	139
D Gussage St. Michael Manor	Mrs. Good	5	1 4	200	33·3	35·76	202	149
d Iwerne Courtney Rectory	Rev. R. H. Gundry	5	1 2	200	34·2	38·32	..	126
D Iwerne Minster (Preston House)	Major H. W. Aston	5	1 0	220	33·2	36·59	177	145
D Iwerne Minster Vicarage	Rev. R. A. Bond	5	1 3	234	..	32·25?	187	136
D Iwerne Minster House Gardens	Mr. W. Phillips	5	1 0	244	33·9	33·47	164	143
D Sturminster Newton	H. Dawes, Esq.	5	1 6	350	..	33·47	194	140
D Fontmell Magna (Glebe Cottage)	Dr. J. Appleyard	5	1 0	300	29·6	31·93	167	123
Handley (Woodyates Manor)	F. B. Eastwood, Esq.	5	0 9	368	31·9	38·71	..	..
D Cann	A. Macdonell, Esq.	5	1 0	600	..	32·76	185	141
D Shaftesbury	G. P. Barter, Esq.	5	1 0	722	..	30·30	175	131
D East Stour (Homestead)	C. E. Davies, Esq.	8	1 0	330	..	33·66	189	145
5.—EAST AVON. 12 sq. mi.								
SOUTH DEVONSHIRE. (Area, 1707 sq. mi.)								
1.—PARRETT. 7 sq. mi.								
2.—TAMAR & C. 395 sq. mi.								
D Plymouth (Boveysand Lodge)	Rev. J. F. Case	5	1 6	75	..	37·42	188	164
D Plymouth (Cattewater)§	(+A) The Meteorological Office	8	1 0	82	..	36·27	200	161
D Plymouth (The Hoe)	(+A) H. Victor Prigg, Esq., C.E.	8	1 0	116	36·7	40·10	200	163
D Plymouth (Drake's Reservoir)	F. Howarth, Esq., C.E.	5	1 0	149	..	42·83	190	166
D Plymouth (Freedom Park)	(+A) H. Victor Prigg, Esq., C.E.	8	1 0	208	..	44·44	211	176
D Devonport (Rowdens Res.)	F. Howarth, Esq., C.E.	5	1 0	201	..	39·84	201	170
D Plymouth (Hartley Reservoir)	F. Howarth, Esq., C.E.	5	1 0	321	..	46·30	212	176
D Bickley (Roborough Reservoir)	F. Howarth, Esq., C.E.	5	1 0	548	..	54·25	234	178
D Lee Moor Clay Works	R. Martin, Esq.	8	1 0	900	61·6	84·41	238	209
D Yelverton (Oakfield)	H. Edgcombe, Esq.	5	1 0	535	..	63·90	240	196

§ Exposure not orthodox.

DIVISION V.—SOUTH WESTERN COUNTIES—(*con.*).

	STATIONS.	AUTHORITIES.	Diam.	Rain-gauge: Height of Rim above Ground.	Rain-gauge: Height of Ground above Sea Level.	Average Rainfall.	1928: Rainfall.	1928: Days with ·01 in. or more.	1928: Days with ·04 in. or more.
	SOUTH DEVONSHIRE—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
	2.—TAMAR & C.—(*con.*).								
D	Sheepstor (Red Stone)	F. Howarth, Esq., C.E.	5	1 0	760	..	69·39	235	185
D	Sheepstor (Burrator)	F. Howarth, Esq., C.E.	5	1 0	755	..	69·17	235	190
D	Sheepstor (Head Weir)	F. Howarth, Esq., C.E.	5	1 0	720	..	70·24	235	186
D	Dousland Reservoir	F. Howarth, Esq., C.E.	5	1 0	721	..	65·26	245	186
M	Dartmoor (Deancombe Farm)	F. Howarth, Esq., C.E.	5	1 0	807	..	71·44	..	..
D	Dartmoor (Lowery)	F. Howarth, Esq., C.E.	5	1 0	899	..	65·70	229	182
M	Dartmoor (Leather Tor Farm)	F. Howarth, Esq., C.E.	5	1 0	910	..	65·57	..	..
M	Dartmoor (Siwards Cross)	F. Howarth, Esq., C.E.	5	1 0	1074	..	70·56	..	..
D	Whitchurch (Grenofen)	H. Chichester, Esq.	5	1 2	325	..	54·89	247	189
D	Whitchurch (Langstone)	Col. H. F. Coleridge, C.B.E.	5	1 0	700	..	63·61	231	172
D	Whitchurch (Holwell)	F. C. Radcliffe, Esq.	5	1 3	450	..	56·26	232	188
D	Tavistock	W. J. Monk, Esq.	5	1 0	457	..	57·05	234	198
d	Horrabridge (Furzetor)	Col. M. C. Collier	8	0 11	550	..	59·30	..	..
D	Tavistock (The Library)	The Librarian	8	1 0	282	..	50·00	227	179
M	Dartmoor (Double Waters)	F. Howarth, Esq., C.E.	5	1 0	1165	..	80·15	..	..
M	Dartmoor (N. Hessary Tor)	F. Howarth, Esq., C.E.	5	1 0	1398	..	63·46	..	..
D	Mary-Tavy (Blackdown)	H. K. G. Rogers, Esq.	5	1 0	846	..	64·44	244	204
D	Lifton (Kelly House)	Rev. Maitland Kelly	8	2 6	462	..	52·22	230	196
D	Coryton Manor	R. L. Newman, Esq.	5	1 2	450	..	48·51	218	185
	Lew Down (Coombe Trenchard)	H. M. Sperling, Esq.	5	1 0	450	..	47·76	229	172
D	Launceston (Polapit Tamar)	R. C. Coode, Esq.	5	1 0	315	39·3	45·79	231	175
D	Ashwater Rectory	Rev. G. D. Melhuish	5	1 0	500	..	49·04	208	182
	3.—ERM & C. 217 sq. mi.								
D	Salcombe (Blackstone Lodge)	W. J. Shaw, Esq.	5	1 6	280	..	41·92	210	170
D	Salcombe	F. C. Tremlett, Esq.	5	1 0	39	..	(43·22)	(188)	(159)
D	Salcombe (Fairhaven)	C. Shillitoe, Esq.	5	1 0	150	..	39·87	211	159
D	Salcombe (Malborough)	Rev. H. C. B. Lethbridge	5	1 0	360	..	37·52	193	155
D	Kingsbridge	W. N. Patey, Esq.	5	1 6	150	..	(45·26)	(195)	(163)
D	Yealmpton (Torr)	Miss M. Wimbush	5	0 11	100	..	45·06	238	167
D	Ermington (Strode)	Capt. H. Gore Hawker	5	1 0	75	..	51·43	232	180
D	Ivybridge (Filham House)	H. Alger, Esq.	5	1 0	160	..	53·12	215	183
D	Wrangaton (Plymouth M. Hos.)	H. Victor Prigg, Esq., C.E.	5	1 0	607	..	64·08	214	191
D	South Brent (Beechfield)†	Miss Kingwell	5	1 0	500	60·3	79·53	216	184
D	South Brent (Badworthy)	Miss D. B. Latham	5	1 2	550	66·0	90·17	205	180
D	S. Brent (Didworthy San.)	Resident Medical Officer	5	1 0	657	..	69·69	197	180
	Cornwood (Yealm Head No. 5)	W. H. Thompson, Esq., C.E.	5	1 0	540	..	76·98	226	191
	Cornwood (Yealm Head No. 1)	W. H. Thompson, Esq., C.E.	5	1 0	943	..	89·30	..	..
	Cornwood (Yealm Head No. 2)	W. H. Thompson, Esq., C.E.	5	1 0	1305	..	84·74	..	..
	Cornwood (Yealm Head No. 4)	W. H. Thompson, Esq., C.E.	5	1 0	1415	..	88·19	..	..
	Cornwood (Yealm Head No. 3)	W. H. Thompson, Esq., C.E.	5	1 0	1416	..	85·25	..	..
	4.—DART. 197 sq. mi.								
D	Dartmouth (Ridge Hill)	Dr. H. J. Campbell	5	1 0	120	..	52·61	218	172
D	Churston Ferrers (Greenway)	Mrs. C. Williams	5	0 9	..	..	50·98	175	160
D	Brixham (Combe Bank)	H. Clayton, Esq.	5	6 6	115	..	43·70	198	145
D	Ashprington (Myrtle Cottage)	G. H. Beecheno, Esq.	5	1 0	250	..	43·30	167	153
D	Waddeton Court	Sir A. L. Goodson, Bart.	5	1 0	175	..	47·83	162	143
D	Stoke Gabriel (Maisonnette)	Edward Stobart, Esq.	5	1 0	100	..	54·46	201	183
D	Totnes (Dundridge Gardens)	Mr. C. H. Cole	5	1 0	250	..	59·31	214	180
D	Paignton (Queen's Park)	C. Bellinger, Esq.	8	1 0	11	..	41·14	194	159
D	Paignton Vicarage	Rev. Preb. H. M. Drake	5	1 0	42	..	42·71	190	160
D	Paignton (Claylands)	G. M. Rosling, Esq.	8	1 2	150	..	44·01	203	150
D	Totnes (Walrond House)	H. Hurman, Esq.	5	1 2	40	..	60·79	190	169
D	Totnes (Berry Pomeroy)	C. Barran, Esq.	5	1 6	185	..	51·04	195	159
D	Totnes (Staverton)	J. A. Devenish, Esq.	5	0 11	50	..	53·76	184	162
D	Dean Prior Vicarage	Rev. H. H. Breton, M.A.	8	1 0	331	..	89·55	240	204
D	Ipplepen Vicarage	Rev. R. D. Cooke	5	1 0	266	..	47·44	182	162
D	Holne (Church Park Cottage)	L. W. Frost, Esq.	5	1 6	620	59·8	81·69	211	184
D	Ashburton (Hele House)	E. M. Dowson, Esq.	5	1 0	350	..	61·36	214	179
D	Ashburton (Druid House)	J. S. Amery, Esq.	5	1 0	583	51·7	62·51	216	190

† Formerly known as Great Aish.

DIVISION V.—SOUTH WESTERN COUNTIES—(*con.*).

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SOUTH DEVONSHIRE—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
4.—DART—(*con.*).								
D Ashburton (Leusdon Lodge)	Col. S. R. A. Hankey, D.S.O.	5	1 0	800	..	65·87	210	183
d Princetown (Huccaby House)	Lt.-Col. H. H. Joll, D.S.O.	5	1 0	900	..	67·48	..	..
D Princetown (Wydemeet)	Colin M. E. May, Esq.	5	1 0	900	..	74·46	239	207
D Princetown (H.M. Prison)	The Governor	5	1 0	1359	81·9	100·50	229	207
‡W Dartmoor (Cowsic Valley)	F. Howarth, Esq. C.E.	8	1 6	1352	..	79·30	..	..
‡M Dartmoor (Black Dunghill) No. 5	F. Howarth, Esq., C.E.	8	1 0	1590	..	57·00	..	..
‡M Dartmoor (Beardown Tor) No. 3	F. Howarth, Esq., C.E.	8	1 0	1550	..	56·35	..	..
‡M Dartmoor (White Tor) No. 1	F. Howarth, Esq., C.E.	8	1 0	1640	..	52·00	..	..
D Postbridge (Archerton)	Miss E. M. Bennett	5	1 0	1320	..	101·63	221	205
‡M Dartmoor (Devil's Tor) No. 2	F. Howarth, Esq., C.E.	8	1 0	1785	..	55·55	..	..
‡M Dartmoor (Cowsic Head) No. 4.	F. Howarth, Esq., C.E.	8	1 0	1580	..	70·15	..	..
D Postbridge (Warren House Inn)	S. C. Chapman, Esq., C.E.	5	1 0	1400	..	87·20	221	216
5.—TEIGN. 209 sq. mi.								
D Torquay (Cary Green)	The Town Clerk	5	1 0	12	33·0	35·73	188	152
D Torquay (Middle Lincombe Rd.)	Miss L. M. Brown	5	1 0	250	..	33·65	191	146
D Torquay (Abbey Road)	Henry Brown, Esq.	5	1 0	125	..	38·78	188	160
d Torquay (Shiphay Manor)	R. P. Kitson, Esq.	5	1 0	200	..	(41·64)	..	..
D Newton Abbot (Seale Hayne Coll.)	The Principal	5	1 0	357	..	41·44	206	154
Teignmouth (Bonnicliff)	Miss Horner	5	1 0	260	..	36·86	187	..
Teignmouth (Woodlands)	S. B. Harris, Esq.	5	1 0	50	..	33·92	..	..
D Teignmouth (Coombe Vale)	John F. Caley, Esq.	5	1 0	250	..	31·69	184	140
D Teignmouth (Landscore Road)	Dr. E. E. Moore	5	1 0	143	..	34·82	199	149
D Teignmouth (Den Gardens)	G. Rossiter, Esq.	8	1 0	19	31·8	34·66	190	144
D Teignmouth (Hazledown Res.)	G. Rossiter, Esq.	8	1 0	425	..	38·60	189	161
D Teignmouth (Shaldon Res.)	G. Rossiter, Esq.	5	1 0	213	..	39·75	180	151
D Teignmouth (Landscore Res.)	G. Rossiter, Esq.	8	1 0	133	..	36·85	188	155
D Teignmouth (The Shrubbery)	E. A. Norton, Esq.	8	1 0	275	..	35·34	208	163
D Ilsington	Miss E. Willcocks	5	1 0	650	..	57·52	208	178
D Dawlish (The Lawn)	S. F. C. Churchward, Esq.	5	1 6	18	..	31·46	..	..
D Dawlish (Luscombe Castle)	Peter Hoare, Esq.	8	1 2	175	..	42·18	216	170
D Bovey Tracey (Hedgebarton)	S. C. Chapman, Esq., C.E.	5	1 6	1137	..	71·54	216	190
D Bovey Tracey (Edymead)	Rev. W. V. Vickers	5	1 0	200	..	42·09	186	153
D Chudleigh (Rock House)	G. F. Wright, Esq.	5	1 2	190	..	38·39	189	147
Ashcombe (Thorns Reservior)	S. F. C. Churchward, Esq.	5	1 6	550	..	40·96	..	..
Chagford (Whiteridge)	S. C. Chapman, Esq., C.E.	5	1 6	1650	..	(93·41)	..	..
D Moretonhampstead (Bullaton)	S. C. Chapman, Esq., C.E.	8	1 0	928	..	47·94	231	178
D Moretonhampstead (Mardon)	S. C. Chapman, Esq., C.E.	8	1 0	837	..	41·60	231	171
North Bovey (Manor House)	Mr. J. T. Laurence	5	1 0	700	..	56·67	229	179
Chagford (Toms Hill)	S. C. Chapman, Esq., C.E.	5	1 6	1500	..	90·38	..	..
Chagford (Hempson)	S. C. Chapman, Esq., C.E.	5	1 6	1350	..	85·86	..	..
D Christow (Kennick) No. 1	S. C. Chapman, Esq., C.E.	8	1 0	836	41·7	47·79	227	168
D Christow (Kennick) No. 2	S. C. Chapman, Esq., C.E.	8	1 0	860	..	47·30	228	166
D Chagford (Fernworthy)	S. C. Chapman, Esq., C.E.	5	1 0	1150	..	80·65	219	192
Chagford (Thornworthy Down)	S. C. Chapman, Esq., C.E.	5	1 6	1250	..	74·41	..	..
D Christow (Smithacott)	S. C. Chapman, Esq., C.E.	8	1 0	861	..	44·31	226	163
D Moretonhampstead (Stinhall)	S. C. Chapman, Esq., C.E.	5	1 6	844	..	61·31	205	186
M Moretonhampstead (Blckngstne)	S. C. Chapman, Esq., C.E.	5	1 0	1158	..	41·11	..	..
D Christow (Laployd)	S. C. Chapman, Esq., C.E.	5	1 6	1041	..	49·15	225	165
D Chagford (Thornworthy)	Miss W. H. Varwell	5	0 7	1150	68·9	79·31	234	194
d Chagford (Dartmoor Sanatorium)	T. J. Smith, Esq.	5	1 4	750	50·3	59·17	208	163
D Chagford (Huish)	Col. P. Hart Dyke, D.S.O.	5	1 0	595	45·6	53·37	226	180
6.—EXE. 445 sq. mi.								
D Exmouth (Douglas Avenue)	Mrs. S. G. Gillum	5	0 10	80	..	28·61	182	132
D Exmouth (Nidderdale)	Mrs. Herbert Stewart	5	1 0	51	..	27·80	197	139
D Exmouth (Waterworks Road)	S. Hutton, Esq., C.E.	5	1 0	195	..	29·65	189	138
D Exmouth (Filters, Salterton Rd.)	S. Hutton, Esq., C.E.	8	8 6	195	..	31·66	196	155
D Exmouth (Filters, Capel Lane)	S. Hutton, Esq., C.E.	5	8 6	240	..	30·98	196	150
D Starcross	H. Falkner, Esq.	5	1 0	10	..	32·42	191	152

‡ Gauge over-exposed on moor.

DIVISION V.—SOUTH WESTERN COUNTIES—(*con.*).

	STATIONS.	AUTHORITIES.	Diam.	Rain-gauge Height of Rim above Ground.	Rain-gauge Height of Ground above Sea Level.	Average Rainfall.	1928 Rainfall.	1928 Days with ·01 in. or more.	1928 Days with ·04 in. or more.
	SOUTH DEVONSHIRE—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
	6.—EXE—(*con.*).								
D	Lympstone (Manor House)	Gilbert Shelden, Esq.	5	0 11	54	..	30·91	180	146
d	Lympstone (Mussel Purifn. Stn.)	The Director	8	1 9	4	..	30·67	(179)	(135)
D	Woodbury (Oakhayes)	E. S. Chattock, Esq.	5	1 0	200	..	31·74	211	161
d	Woodbury (Little Orchard)	Miss J. Waters	5	1 0	420	..	34·06	(191)	(161)
d	Topsham (Ebford)	Lt.-Col. B. W. Bogle	5	1 0	45	..	30·31	..	..
d	Topsham (Altamira)	Mrs. Wimbush	5	0 9	120	..	30·26	152	125
D	Alphington (Trood House)	Lt.-Col. T. L. Ormiston	5	1 11	75	..	32·08	202	141
d	Exeter (Hatfield, Longdown)	C. Holman, Esq.	5	0 10	450	..	35·37	(192)	(145)
d	Aylesbeare (Rosamondford)	A. T. Loram, Esq.	5	0 9	220	..	32·89	..	146
D	Exeter (Devon & Exeter Inst.)	J. E. Coombes, Esq.	5	13 7	155	30·5	32·29	197	151
D	Exeter (The Close)	The Ven. Arch. T. N. Leeke	5	1 2	120	..	33·23	208	148
	Exeter (The Close)	Rev. Canon D. McLaren	5	0 9	120	..	32·46	194	153
D	Exeter (Hele's School)	W. P. Baron, Esq.	8	6 0	133	..	32·43	186	152
D	Tedburn St. Mary Rectory	Rev. H. Rusbridger	5	0 10	400	..	36·60	228	174
d	Spreyton (Fuidge Manor)	Rev. E. V. Freeman	5	1 0	710	..	33·68	..	145
D	Rockbeare Manor	Lt.-Col. H. Spencer Follett	5	0 10	180	..	30·55	186	146
D	Brampford Speke	S. Stevens, Esq.	5	2 0	130	..	29·15	162	137
D	Crediton (Ship Hotel)	R. Stanley Clarke, Esq.	8	1 2	200	..	33·82	220	152
D	Crediton (Palace Cottage)	Dr. G. Rice	5	2 2	120	..	33·31	222	155
D	Silverton (Killerton)	Rt. Hon. Sir F. Dyke Acland, Bt.	5	1 0	160	..	31·61	168	148
D	Silverton	G. B. Savery, Esq.	5	1 0	260	..	33·18	212	140
D	Crediton (Okefield)	Seymour F. Pope, Esq.	5	1 0	325	..	32·01	227	151
D	Copplestone (Coplestone House)	Miss M. Pope	5	0 11	315	..	35·14	226	162
D	Bradninch (Dunmore House)	Miss H. R. Hepburn	5	1 0	300	..	36·99	193	160
D	Cullompton	Murray T. Foster, Esq.	5	1 0	202	35·3	37·41	219	161
D	Kentisbeare	A. E. Painter, Esq.	5	1 0	304	..	34·89	196	144
D	Tiverton (St. Aubyn's Park)	F. C. Fox-Strangways, Esq.	5	1 0	394	..	41·36	220	163
D	Tiverton (Hartnolls)	Maj.-Gen. F. A. Bowles, C.B.	5	1 4	226	..	42·71	211	163
D	Tiverton (Alstree, Halburton)	Miss M. G. Izat	5	0 9	240	..	40·21	235	169
D	Tiverton (Lythecourt)	A. L. Sadler, Esq.	5	1 2	220	..	42·32	186	159
D	Hemyock (Windlehurst)	Sir Arthur Tedder, C.B.	5	1 0	750	..	37·76	211	167
D	Bampton (Stuckeridge)	Brig.-Gen. J. C. Livingstone-Learmonth, C.M.G.	5	1 4	650	..	41·88	186	164
d	Bampton (Castle Grove)	Major B. M. Read	5	2 0	272	..	46·52	..	..
	7.—AXE & C. 237 sq. mi.								
D	Budleigh Salterton (Tordown)	Col. F. R. Loveband	7	0 8	150	..	31·35	176	142
D	Budleigh Salterton (Bragwick)	E. Fisher, Esq.	5	1 0	50	..	28·71	188	148
D	Budleigh Salterton (Tidwell Ho.)	Mrs. J. H. Foster	5	1 0	100	..	29·08	166	139
D	Budleigh Salterton (Knowle Ho.)	Mrs. Pepys	5	2 4	230	..	32·85	168	156
	Budleigh Salterton (Squabmoor)	S. Hutton, Esq., C.E.	5	1 0	267	..	32·16	..	..
	East Budleigh (Bicton Common)	S. Hutton, Esq., C.E.	5	1 0	300	..	31·73	..	..
D	East Budleigh (Bicton Gardens)	Mr. E. H. High	5	1 0	90	..	32·33	193	157
D	Salcombe Regis (Steephill)	Burleigh D. Kilburn, Esq.	5	1 0	150	..	32·37	190	154
D	Sidmouth (Sidmount)	Miss C. M. Radford	5	1 0	149	32·4	32·21	185	152
D	Sidmouth (Sidmount)	Miss C. M. Radford	5	1 0	186	..	32·82	184	148
D	Seaton (Pendeen)	Rev. A. H. Skipper	5	2 6	70	..	33·80	193	144
D	Seaton (The Copse)	H. J. Roberts, Esq.	5	1 0	220	..	35·78	207	155
D	Sidmouth (Harpford)	P. M. Miller, Esq.	5	1 0	195	..	33·54	184	151
D	Lyme Regis (Pinhay)	Mr. W. F. Shillabeer	5	1 11	465	34·9	38·03	191	141
D	Lyme Regis (Ware)	Capt. R. A. D. Fullerton	5	0 10	318	..	36·18	195	147
D	Colyton (Colyford)	Mrs. J. W. Saunders	8	5 0	50	..	31·36	184	122
	Ottery St. Mary (Easthayes)	T. A. B. Pares, Esq.	8	1 0	550	..	34·16	..	..
D	Ottery St. Mary (West Hill)	B. Stansbury, Esq.	5	1 6	340	..	35·18	212	156
D	Ottery St. Mary (Broad Street)	H. D. Badcock, Esq.	5	4 0	170	..	35·60	210	155
D	Kilmington (Haddon Corner)	A. Hitchcock, Esq.	5	1 0	410	39·0	40·49	208	150
M	Kilmington (Summerleaze)	A. Hitchcock, Esq.	5	1 0	82	..	36·79	..	..
D	Axminster (Lea Combe House)	Major A. C. F. Luttrell	5	1 3	170	..	42·64	183	145
D	Houiton (Beech Grove)	Major A. T. Baker	5	0 10	340	..	39·76	198	163

DIVISION V.—SOUTH WESTERN COUNTIES—(*con.*).

	STATIONS.	AUTHORITIES.	Rain-gauge Diam.	Height of Rim above Ground.	Height of Ground above Sea Level.	Average Rainfall.	1928 Rainfall.	Days with ·01 in. or more.	Days with ·04 in. or more.
	SOUTH DEVONSHIRE—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
	7.—AXE—(*con.*)								
D	Axminster (Coaxdon Hall)	Dr. Cecil Woodhouse	5	1 0	165	..	39·17	188	139
D	Membury (Yarty House)	Major W. H. Wilkin	5	1 0	245	..	36·78	183	130
D	Membury (Green Down)	James Lee, Esq.	5	1 0	500	..	44·15	200	136
D	Stockland (Reading Room)	R. T. Watkin-Williams, Esq.	5	1 0	350	..	42·12	179	160
	NORTH DEVONSHIRE. (Area, 898 sq. mi.)								
	1.—NORTH COAST STREAMS. 77 sq. mi.								
D	Croyde Manor	Rev. H. Carter	5	1 3	60	..	44·61	206	159
D	Woolacombe (Hotel Grounds)	R. W. Hansford, Esq.	5	1 0	59	..	34·12	204	162
D	Ilfracombe (Reservoir)	F. B. Goodman, Esq., C.E.	5	1 0	395	..	58·63	227	188
d	Ilfracombe (Langleigh)	H B. Holland, Esq.	5	1 0	127	..	(51·39)	(216)	(171)
D	Ilfracombe (Capstone Hill)	*F. B. Goodman, Esq., C.E.	5	1 0	74	36·0	40·36	209	160
	2.—TAW. 442 sq. mi.								
D	Okehampton (South Zeal)	Capt. S. T. Dean-Pitt	5	1 0	750	..	48·62	213	177
	Spreyton (Lynderies)	Lt.-Col. J. Simpson	5	1 0	655	..	37·77	..	..
D	Witheridge	Rev. J. A. S. Castlehow	5	1 0	600	..	42·77	229	178
D	High Bickington Rectory	Rev. C. V. Wansbrough	5	0 10	587	..	40·91	224	178
D	East Anstey (Rhyll Manor)	Mrs. E. L. Hancock	5	1 6	850	..	49·02	197	176
D	Filleigh (Castle Hill Gardens)	The Countess Fortescue	12	4 0	317	..	49·07	225	187
D	Molland (Green Cot)	S. J. Case, Esq.	5	1 0	674	..	55·82	235	192
D	Barnstaple (N. Dev. Athenæum)	Miss E. Young	8	1 0	25	36·6	42·90	235	176
D	Barnstaple (Hele Manor Park)	M. B. B. Heath, Esq.	6	1 0	130	..	44·10	207	167
D	Barnstaple (Fort Hill)	Miss E. F. Sterry	5	1 0	200	..	45·30	235	181
D	Barnstaple (Westaway)	Major O. L. Trechmann	5	1 0	140	..	44·63	216	168
	Goodleigh (Willesleigh House)	Lt.-Col. Montague H. Hall	5	1 0	375	..	45·22	206	184
D	Goodleigh (Gunn Cottage)	Major H. Sandford Claye	5	1 0	720	..	49·29	227	189
D	Braunton	A. J. Besley, Esq.	5	1 0	145	..	41·01	204	160
D	Arlington Court	Miss Chichester	5	1 0	613	53·8	65·79	210	198
D	Challacombe	F. B. Goodman, Esq., C.E.	5	1 0	815	..	76·79	236	203
D	Georgeham (Spreacombe Manor)	A. Leigh Barker, Esq.	5	0 9	340	..	47·48	216	174
	3.—TORRIDGE. 342 sq. mi.								
D	Okehampton (Uplands)	E. P. Burd, Esq.	5	1 0	700	46·6	56·21	225	182
D	Okehampton Grammar School	W. Hunter, Esq.	5	1 0	500	..	55·95	202	177
d	Monkokehampton	Rev. R. Y. Holmes	5	0 6	245	..	40·18	..	..
	Dolton (Hilliers)	A. Smythies, Esq.	5	1 3	380	..	41·54	217	..
D	Torrington (Enfield)	G. M. Doe, Esq.	5	1 0	337	39·3	44·16	211	181
D	Torrington (Stevenstone House)	Lt.-Col. B. C. James	5	1 0	395	..	44·76	190	175
D	Parkham (Melbury Moor)	F. Harding, Esq.	5	1 0	633	..	59·79	223	192
D	Parkham (Melbury Reservoir)	F. Harding, Esq.	5	1 0	517	..	68·54	224	200
D	Buckland Brewer (The Cottage)	Miss B. G. Rogers	5	0 11	469	..	55·61	240	197
D	Littleham (Orleigh Court)	W. H. Rogers, Esq.	5	1 0	260	..	48·41	219	190
D	Landcross (South Close)	C. R. C. Hibbert, Esq.	5	1 0	100	..	45·73	218	177
D	Bideford (Jennett's Res.)	F. J. Harris, Esq., C.E.	5	1 0	62	..	44·79	208	183
D	Bideford (Webbery)	Mrs. C. E. Boyd	5	1 0	355	..	44·68	221	175
D	Westleigh House	Rev. H. G. deC. Stevens Guille	5	1 0	187	..	42·69	233	182
D	Northam (Cluden)	Miss M. L. Varwell	5	0 9	215	..	41·57	233	172
D	Westward Ho! (Royal Golf Club)	Major A. Newton-King	5	1 6	10	..	39·91	201	168
	4.—WEST COAST STREAMS. 32 sq. mi.								
D	Hartland (Fosfelle)	R. P. Chope, Esq.	5	1 0	480	..	53·06	227	187
D	Clovelly Court	Mr. H. Tuke	5	1 0	360	..	56·48	233	205
	5.—EXE. 5 sq. mi.								

* At Ropery Meadow previous to April, 1922.

DIVISION V.—SOUTH WESTERN COUNTIES—(*con.*).

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			in.	*ft. in.*	*ft.*	*in.*	*in.*		
	CORNWALL. (Area, 1363 sq. mi.)								
	1.—CAMEL & N.W. COAST STREAMS. 458 sq. mi.								
	Crowan (Boswyn Res.)	Camborne Water Co.*	..	..	511	..	54·93	225	..
D	Lelant	Mrs. Tyringham	5	1 2	50	..	50·75	219	185
D	Hayle (Gwythian Road)	Caldwell Harpur, Esq.	5	0 10	98	..	44·61	215	180
D	Camborne	Miss I. Osborne	5	2 0	402	..	53·11	204	182
D	Camborne (Uplands)	H. G. Rix, Esq.	5	1 0	275	..	46·29	220	175
D	Redruth (Trewirgie)	A. P. Jenkin, Esq.	5	1 0	398	45·3	52·71	230	187
	Redruth (Green Lane Nurseries)	F. Sanders, Esq.	5	1 0	270	..	49·09	..	..
d	St. Agnes (Church Town)	Dr. W. C. Whitworth	5	5 0	318	36·5	38·02 ?	(223)	(174)
M	Newquay (Reservoir)	Dr. C. C. Vigurs	5	1 0	210	..	41·06	..	..
D	Newquay (Mount Wise) No. 1	Dr. C. C. Vigurs	5	1 0	190	33·2	39·02	209	166
D	Bodmin (Polgwin)	H. D. Foster, Esq.	5	1 0	400	..	56·60	231	199
D	Bodmin (Castle Hill House)	Mrs. Leslie	5	1 0	484	..	55·78	254	194
d	Wadebridge (Bryn)	Miss K. D. Phillips	5	1 6	50	..	46·35	..	..
D	Wadebridge (Trewornan)	Brig.-Gen. L. J. Hext, CMG.	5	1 0	30	..	42·92	228	169
D	St. Kew (Skisdon)	Mrs. Braddon	5	1 0	100	..	47·08	237	190
	St. Minver (Trebetherick)	A. T. Roseveare, Esq.	8	1 0	50	..	39·68	..	..
d	Camelford (Stannon Clay Wks.)	English China Clays, Ltd.	8	1 5	800	..	65·58	232	..
	Bude (School House)	Karl Durston, Esq.	5	1 0	50	..	37·51	218	172
D	Bude (Flexbury Hall)	E. L. Winter, Esq.	..	..	50	..	42·54	..	..
D	Morwenstow (Tonacombe Man.)	W. W. Martyn, Esq.	5	1 0	450	..	42·71	219	190
	2.—FOWEY & S.E. COAST STREAMS. 620 sq. mi.								
	Lizard	J. J. Emmott, Esq.*	5	1 0	244	..	37·61	224	161
D	Ruan Minor	Miss H. F. Shepherd	5	1 0	210	..	43·87	213	173
	Mullion (Council School)	E. J. Perry, Esq.*	5	2 0	208	..	43·20	..	..
D	Mullion	H. H. Penrose, Esq.	5	0 10	178	..	43·16	188	155
D	Porthcurno	Eastern Telegraph Co.	5	1 0	150	..	42·59	237	180
	St. Keverne (Lanarth)	P. D. Williams, Esq.	5	1 3	310	..	51·90	232	176
d	Bosahan (St. Martin-in-Meneage)	Mrs. Colbourne*	..	..	240	..	51·61	(209)	(177)
D	Constantine (Pons-a-Verran)	A. Mayne, Esq.	8	1 0	60	..	45·02	219	176
D	Penzance (Trewidden)	Mr. J. H. Murley	9	1 0	275	..	45·73	211	187
	Penzance (Lower Larrigan)	E. T. Gregory, Esq.	5	1 0	70	..	46·92	215	..
D	Penzance (Morrab Gardens)	C. H. Benn, Esq.	5	1 0	54	40·9	45·97	230	185
D	Penzance (Trengwainton House)	Lt.-Col. E. H. W. Bolitho.	8	1 2	400	..	50·88	224	195
D	Gulval (Co. Council Plot)	Mr. A. E. Gunningham	5	1 0	21	..	47·10	219	180
§D	Falmouth (Pendennis Castle)	Meteorological Office	8	0 9	200	..	39·71	194	153
D	Falmouth Observatory (+A)	Roy. Cornwall Poly. Soc.	5	1 0	167	43·6	49·29	206	167
D	Falmouth (The Crossways) late	Comdr. A. Rogers, R.N.R.	5	1 3	75	..	48·34	209	171
D	Falmouth (Trefusis)	Lt.-Col. The Hon. H. W. F. Trefusis.	5	1 3	200	..	46·04	209	166
d	Wendron (Halwin School)	F. P. Jenkin, Esq.	5	1 6	540	..	60·05	198	181
D	Penryn (Ashfield)	J. G. Stephens, Esq.	5	1 0	95	..	50·34	227	176
M	Devoran	Lord Clifden*	5	1 0	120	..	(49·15)	..	..
D	Gwennap (Trevince)	C. H. Beauchamp, Esq.	12	1 0	240	..	51·90	225	179
D	St. Day (Council School)	R. R. Blewett, Esq.	5	0 9	390	..	57·12	231	186
D	Truro (Killiow)	Miss E. F. A. Daubuz	5	1 0	250	..	45·51	202	178
D	Truro (Tregolls)	Miss C. L. Rashleigh	5	1 0	65	..	51·05	225	182
D	Truro W.W. (Lower Tregurrow)	W. J. Lean, Esq.	5	1 0	71	..	51·18	212	186
D	Mevagissey	C. Metcalfe, Esq.	5	1 0	100	..	47·56	221	174
D	Polperro	F. H. Perrycoste, Esq.	5	0 11	100	..	38·83	218	166
D	Fowey	C. I. Wellington, Esq.	5	1 0	51	..	39·68	(194)	(170)
D	St. Austell (Charlestown Old Vic.)	C. A. Battiscombe, Esq.	5	4 0	204	..	50·03	212	184

* *Per* Cornwall Rainfall Association.
§ Exposure not orthodox.

DIVISION V.—SOUTH-WESTERN COUNTIES—(*con.*).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge Height of Rim above Ground.	Height of Ground above Sea Level.	Average Rainfall.	1928 Rainfall.	Days with ·01 in. or more.	Days with ·04 in. or more.
CORNWALL—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
2.—FOWEY & S.E.—(*con.*).								
D St. Austell (Trevarna)	W. M. Coode, Esq.	5	1 0	300	45·8	52·08	224	188
D Looe (Morval)	Capt. A. H. Tremayne, R.N.	5	1 0	150	..	52·61	209	183
D Downderry	Mrs. G. E. Sneyd	5	1 0	200	..	43·10	211	184
D Lostwithiel (The Terrace)	R. Pease, Esq.	5	1 0	110	..	58·83	250	200
D Menheniot (Coldrenick)	Rev. F. E. Trelawny	5	1 0	301	..	54·31	204	177
D Liskeard (St. Pinnock Rectory)	Rev. S. H. Farwell Roe	5	1 0	400	..	67·55	272	218
D Liskeard (Penmilder)	Miss D. P. Foster	5	1 0	350	..	57·62	228	189
St. Clear (Tregarric)	Col. J. D. A. Roberts	5	1 0	800	..	60·42	..	..
D Bolventor Vicarage	Rev. A. S. Rashleigh	5	1 0	845	..	81·25	250	212
3.—TAMAR & C. 279 sq. mi.								
D Devonport (Empacombe)	Miss M. C. Algate	5	2 0	15	36·8	42·93	208	161
D Devonport (Cremyll)	S. B. Wilcox, Esq.	5	1 4	25	..	40·24	214	175
D Torpoint (Trethill House)	Col. J. D. A. Roberts	5	1 0	200	..	39·87	206	169
D Saltash (Pentillie Castle)	W. T. Johnson, Esq.	5	2 3	150	..	55·17	224	147
D Albaston (Nanaimo House)	N. R. Rosekilly, Esq.	5	1 0	500	..	46·14	212	165
D Launceston (Landue)	Miss S. E. Tregoning	5	0 11	225	..	47·50	249	191
D Launceston (Hexworthy)	R. B. Rogers, Esq.	5	1 0	270	43·8	47·14	239	178
D Launceston (Pendruccombe)	Miss L. C. Seccombe	5	1 0	469	..	44·66	224	174
Egloskerry (Tregeare)	E. G. B. Lethbridge, Esq.	5	1 6	613	47·1	52·95	..	..
D North Tamerton (Davies)	W. S. Bray, Esq.	5	1 0	390	..	38·85	211	186
4.—INSULAR.—Isles of Scilly. 6 sq. mi.								
D St. Mary's	The Meteorological Office	8	1 0	165	31·9	38·34	229	177
D Tresco Abbey	Maj. A. A. Dorrien Smith, D.S.O.	8	2 4	40	32·6	39·00	239	175
SOMERSETSHIRE. (Area, 1630 sq. mi.)								
1.—LOWER AVON. 300 sq. mi.								
D Wanstrow (The Manor Cottage)	P. E. B. Warburton, Esq.	5	1 0	465	37·7	43·08	182	161
D Shepton Mallet (Pondsmead)	R. A. Hobhouse, Esq.	8	1 0	710	44·9	50·53	220	179
D Frome W. W. (Egford)	L. Slaughter, Esq.	8	2 0	270	35·8	41·12	220	152
D Frome (Orchardcroft)	H. G. Chislett, Esq.	5	1 0	265	31·2	36·66	203	143
D Frome (Selwood School)	Miss A. K. Coombs	5	1 7	320	33·9	36·65	201	152
D Mells (Selwood)	Miss E. G. Horner	5	1 0	344	37·2	41·44	207	153
D Binegar (Gurneyslade)	Rev. G. B. Hicks	5	1 0	588	43·3	48·51	202	166
D Stratton-on-Fosse (Downside Ab)	Rev. G. B. Hicks	8	1 0	600	41·5	45·50	207	158
D Orchardleigh Park	Major A. C. Duckworth	8	0 11	302	32·8	37·63	175	139
D Chilcompton (The Woodlands)	C. H. M. Thring, Esq.	5	0 10	450	..	48·06	214	162
D Chewton Mendip (The Priory)	The Earl Waldegrave	5	1 0	550	45·0	52·35	216	156
D Midsomer Norton (Island Ho.)	Dr. G. S. Pollard	5	1 6	300	36·5	42·19	189	160
D Midsomer Norton (Dymboro')	Dr. A. Bulleid	5	1 0	357	35·8	42·08	181	140
d Radstock (Frome Hill)	C. H. Perry, Esq.	8	2 6	330	34·7	38·63	187	146
D Litton (Sherborne Res.)	J. A. McPherson, Esq., C.E.	5	0 11	340	40·0	49·34	186	149
w Harptree Hill	J. A. McPherson, Esq., C.E.	8	1 0	784	41·0	50·23	..	..
D Tellisford (Crabb Hall)	Dr. W. C. Everley Taylor	5	0 9	182	..	30·88	185	133
D Hinton Blewitt Manor	Maurice Church, Esq.	5	1 3	500	39·6	49·51	240	173
d High Littleton Vicarage	Rev. T. H. Fitzpatrick	5	0 11	446	34·7	39·85	..	..
d Clutton (Council School)	W. J. Pullen, Esq.	5	1 0	420	..	(40·06)	..	..
D Pensford (Sutton Court)	Lord Strachie	8	1 0	280	..	40·95	212	151
d Monkton Combe (Crossways)	M. J. Lipscomb, Esq.	5	1 0	210	33·2	38·71	..	..
D Pensford (Hunstrete House)	H. Leyborne Popham, Esq.	5	0 9	400	33·7	38·40	199	140
D Chew Magna	J. A. McPherson, Esq., C.E.	5	1 4	180	36·3	39·39	173	148
D Pensford (Publow School Ho.)	A. Hayes, Esq.	5	1 0	230	33·2	37·97	177	134

DIVISION V.—SOUTH WESTERN COUNTIES—(*con.*).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge: Height of Rim above Ground.	Rain-gauge: Height of Ground above Sea Level.	Average Rainfall.	1928: Rainfall.	1928: Days with ·01 in. or more.	1928: Days with ·04 in. or more.
SOMERSETSHIRE—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
1.—LOWER AVON—(*con.*).								
D Bath (Henrietta Park)	Bath Corporation	5	1 0	66	30·3	34·74	188	137
D Bath (Monkton Combe)	W. G. Lock, Esq.	5	1 0	450	30·3	38·03	223	162
D Bath (Combe Lodge)	Major T. H. Clark	5	1 0	525	31·4	37·02	172	143
D Bath (Combe Down)	Dr. T. F. Vaisey	5	0 8	550	34·0	35·72	..	..
D Bath (Statutory Hospital)	Bath Corporation	5	1 0	520	32·8	38·08	161	141
D Bath (Claverton Lodge)	G. Lipscomb, Esq.	5	1 3	375	29·1	34·81	168	135
D Bath (Lansdown Place)	Lady Stothert	5	1 2	410	31·5	39·08	204	157
D Bath (Charlcombe)	Philip Porteous, Esq., C.E.	5	1 0	325	31·4	33·98	171	129
D Batheaston Reservoir	Philip Porteous, Esq., C.E.	5	1 0	248	31·1	37·63	202	143
d Keynsham (Chewton Road)	A. E. Stephens, Esq.	8	1 0	134	29·6	32·56	..	129
D Bath (Brockham End)	Mr. H. A. Holland	5	1 9	710	29·9	32·19	207	135
D Barrow Gurney Reservoir	J. A. McPherson, Esq., C.E.	5	1 0	300	35·2	40·04	194	149
D Long Ashton (Research Station)	W. H. Neild, Esq.	8	1 0	162	34·1	40·47	211	148
D Walton-by-Clevedon (Lyndhurst)	Rev. F. H. Fowler	5	1 0	200	..	36·20	195	146
D Walton (Canok Lodge)	Major F. J. Winter	5	1 0	150	32·2	36·05	188	142
D Failand House	Miss Agnes Fry	5	1 0	385	34·6	41·59	210	156
d Portishead (Bristol Rd.)	Portishead Dist. Water Co.	5	1 6	24	34·9	39·01	192	147
D Portishead (St. Mary's Road)	Paul Sinnock, Esq.	5	0 10	67	..	35·74	176	141
2.—YEO, AXE & BRUE. 405 sq. mi.								
D Alford Rectory	Rev. A. B. Burney†	5	..	100	30·8	31·44	177	135
D Somerton (Butleigh Court)	R. Neville Grenville, Esq.	8	1 2	95	30·5	30·46	188	148
D Bruton (Redlynch Park)	W. F. Pepper, Esq.	5	1 0	390	32·9	36·42	220	151
D Bruton (King's School)	A. W. Barnes, Esq.	5	1 2	240	..	36·19	206	156
d Bruton (Wyke Champflower)	F. K. Makins, Esq.†	..	..	430	..	35·40	219	..
D Ditcheat Rectory	Rev. H. H. Tripp, M.A.	5	1 0	230	31·5	33·85	196	150
D Street (Overleigh House)	J. B. Clark, Esq.	5	0 10	100	28·5	28·69	195	139
d Street (Hind Hayes)	late Joseph Clark, Esq.	5	1 6	78	28·8	(31·11)	..	..
D Street (Millfield)	Miss Alice Clark	8	0 6	100	29·5	31·33	172	140
D Glastonbury (St. Michael's)	Ven. Archdeacon W. Farrer	5	1 0	220	28·8	31·30	201	155
D Edington	Major A. C. F. Luttrell	5	1 6	90	31·2	32·78	188	155
D Chilton Polden (West House)	Mr. E. Chick	5	1 0	100	28·5	28·11	196	139
D Cossington Manor	J. C. Macro Wilson, Esq.	5	1 0	110	..	29·26	190	140
D Shepton Mallet (Pilton)	Miss E. M. Allen	5	1 3	354	34·6	37·11	217	155
D Shepton Mallet (Cannards Grave)	H. W. Heberden, Esq.	5	1 6	550	..	43·65	204	162
D Shepton Mallet (Charlton)	C. E. Burnell, Esq.	5	1 0	481	38·8	43·66	197	161
D Shepton Mallet (Field House)	F. H. Berryman, Esq.	5	1 0	500	38·6	43·25	202	172
D Shepton Mallet (Sewage Farm)	The Surveyor, U.D.C.	5	1 0	330	38·7	40·96	211	166
D Doulting Vicarage	Rev. H. S. Darbyshire	5	1 0	693	39·8	43·90	200	165
D Wells (Mental Hospital)	Medical Superintendent	5	1 2	300	29·5	36·86	176	142
D Wookey Vicarage	Rev. F. P. Synge	5	2 6	50	33·5	37·27	214	161
D Blackford (Sexey's Farm Sch.)	The Headmaster	5	1 0	61	..	32·61	182	139
D Blackford (Council School)	E. H. Phillips, Esq.	5	1 0	50	..	33·12	206	150
d Wells (Wookey Hole Paper Mills)	W. S. Hodgkinson & Co., Ld.	5	1 0	200	35·1	37·61	..	..
D Wookey Hole (Wookey Ho.)	E. T. Wilson, Esq.	5	1 0	250	..	39·73	206	161
D Burnham (Chalbury)	H. A. Smith Spark, Esq.	5	1 0	20	29·1	32·97	216	154
D Burnham	W. H. Chowins, Esq., C.E.	8	0 9	24	28·5	31·42	193	151
Burnham (Berrow Road)	Rev. C. E. B. Fripp	5	1 0	10	29·3	31·70	183	153
D Burnham (Brent Knoll)	J. Griffith, Esq.	5	5 0	25	30·3	30·80	209	145
D Cheddar (Pumping Station)	J. A. McPherson, Esq., C.E.	5	1 0	50	33·6	38·27	193	155
w Charterhouse	J. A. McPherson, Esq., C.E.	5	1 0	619	43·2	47·74	..	..
w Compton Martin	J. A. McPherson, Esq., C.E.	5	1 0	276	42·4	48·40	..	..
d Shipham (Studleigh End)	Miss E. M. Garaway	5	1 0	540	..	36·45	(197)	(142)
w Ubley (Rookery Farm)	J. A. McPherson, Esq., C.E.	8	1 0	525	44·9	50·62	..	..
D Winscombe (The Down)	J. Grubb, Esq.	5	1 0	295	35·8	39·96	192	154
D Banwell (Eversleigh)	Dr. Kenneth Anderson	5	1 6	50	33·9	36·77	206	155
D Banwell (Banwell House)	Miss M. S. Hewitt	5	1 0	50	35·0	36·79	172	141
w Blagdon Hill	J. A. McPherson, Esq., C.E.	5	1 0	550	40·6	51·41	..	..
D Blagdon (Pumping Station)	J. A. McPherson, Esq., C.E.	5	1 0	112	37·0	44·04	190	145
w Blagdon (Coombe Lodge)	J. A. McPherson, Esq., C.E.	5	1 0	388	39·6	46·73	..	..

† *Per* Mid-Wessex Rainfall Association.

DIVISION V.—SOUTH WESTERN COUNTIES—(*con.*).

STATIONS.	AUTHORITIES.	Rain-gauge Diam.	Height of Rim above Ground.	Height of Ground above Sea Level.	Average Rainfall.	1928 Rainfall.	Days with ·01 in. or more.	Days with ·04 in. or more.
SOMERSETSHIRE—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
2.—YEO, AXE & BRUE—(*con.*).								
w Ubley (Pixey Hole)	J. A. McPherson, Esq., C.E.	5	1 0	300	34·5	35·18	..	..
w Nempnett (West Town)	J. A. McPherson, Esq., C.E.	5	1 0	263	36·3	41·32	..	..
w Burrington (Burrington Links)	J. A. McPherson, Esq., C.E.	5	1 0	335	38·1	43·57	..	..
D Weston-spr-Mare (Clarence Pk.)	W. H. Allen, Esq.	5	1 0	28	31·7	31·19	180	135
D Weston-super-Mare (Feltrim)	Mrs. Chester-Master	..	..	150	..	36·19	188	146
D Churchill (Langford House)	Sidney Hill, Esq.	8	0 10	90	..	44·39	194	154
w Butcombe (Cholwell)	J. A. McPherson, Esq., C.E.	5	1 0	370	38·9	42·16	..	..
D Wrington (The Cottage)	H. C. Bristowe, Esq., M.D.	5	1 0	100	33·2	38·03	186	136
D Wrington (West Hay)	Miss M. C. Meade-King	5	1 2	98	34·0	40·05	206	161
D Wrington (Yeomans)	J. Stuckey, Esq.	5	4 0	135	35·4	41·16	176	150
d Yatton (Hill Court)	E. Harvey, Esq.	..	..	50	..	34·90	..	130
D Yatton (Chelvey)	J. A. McPherson, Esq., C.E.	5	1 0	60	32·5	37·26	187	146
D Backwell Hill	W. Garnett, Esq.	5	1 0	490	33·2	37·62	162	138
D West Town	Theodore Robinson, Esq.	5	1 0	85	34·6	36·58	191	149
D Flax Bourton (The Grange)	C. Onslow Master, Esq.	5	1 0	120	34·0	38·12	154	135
D Clevedon (Gas Works)	J. Harger Pye, Esq.	5	1 2	22	33·5	31·76	168	132
D Clevedon W.W.(Tickenham Rd.)	J. Harger Pye, Esq.	5	1 6	70	31·2	33·14	179	129
D Clevedon (Bowling Green)	Mr. H. H. Brook	5	0 11	126	33·8	35·29	155	137
D Clevedon (Mt. Heber Cottage)	G. M. S. Farmer, Esq.	5	1 0	144	34·3	36·09	203	142
D Wraxall Court	Mr. G. Hyde	5	0 10	200	..	39·24	172	153
3.—PARRETT. 568 sq. mi.								
D Chard (High Street Council Sch.)	F. Barnard, Esq.	5	1 2	425	39·1	40·91	204	145
D Crewkerne (The Reservoir)	E. H. Munford, Esq.	8	1 0	426	33·7	33·97	188	141
D Crewkerne (Bincombe House)	Mrs. R. H. Symons	5	1 3	293	34·7	36·13	184	147
D Crewkerne (Mark's Barn)	Mrs. R. Blake	8	0 9	260	32·1	30·39	198	144
D Chaffcombe House	Col. L. H. Noblett	5	0 11	400	33·1	37·60	226	141
D Combe St. Nicholas	Rev. G. de Y. Aldridge	5	1 0	580	38·4	41·19	245	154
D Coker Court Gardens	Mr. T. H. Gilham	5	1 3	255	33·7	36·03	190	155
D West Coker	G. F. Deedes, Esq.	5	1 6	265	29·6	30·54	184	134
D Ilminster (Whitelackington Ho.)	S. Creed, Esq.	5	3 0	200	33·0	35·71	185	138
D Ilminster (Dillington Park) (R)	Mr. W. Goldthorpe	8	3 0	161	35·6	35·40	174	143
d Yeovil (Reckleford Sch.)	The Headmaster*	..	..	200	..	(31·50)	..	..
D Yeovil (Pen Mill Sewage Works)	Dr. C. W. Gee	5	1 0	102	30·6	33·22	231	154
d Angersleigh (Blagdon Hill)	G. L. Sidey, Esq.	..	..	750	..	(41·29)	..	..
D Angersleigh (Leigh Court)	A. Eastwood, Esq.	8	1 0	360	35·0	36·75	210	154
D Ashbrittle (Kyrle)	Major J. H. Mathias	5	0 9	525	..	43·60	223	169
D Martock Vicarage	Rev. G. W. Saunders	5	0 9	61	29·6	28·27	181	139
D Ash (The Grange)	L. C. R. Tring, Esq.	5	1 3	150	..	29·10	174	136
D Rimpton	P. B. Cardwell, Esq.	5	1 0	147	..	30·41	227	160
D Taunton (The Park)	Dr. John Allen	5	1 0	71	29·5	29·09	201	135
D Taunton (Holy Trinity School)	A. P. Guest, Esq.	5	1 0	65	29·1	28·87	207	138
D Milverton (Spring Grove)	Major R. C. Coldwell	5	1 0	449	36·7	39·31	211	161
D Wiveliscombe (Culverhead)	T. R. Marsh, Esq., C.M.G.	5	1 0	450	39·6	44·06	197	160
D Langport (The Grange)	Miss V. M. Page	5	1 0	50	27·9	23·24	235	141
D Langport (Council School)	H. G. Jefferies, Esq.	5	1 0	52	28·1	29·93	214	147
d N. Cheriton (Maperton House)	Mr. W. Smith	5	1 3	390	35·3	37·48	199	150
D Somerton (The Grange)	R. W. Pretor-Pinney, Esq.	5	1 0	106	27·8	26·89	170	134
d Bishop's Lydeard (Watts Ho.)	Sir Dennis Boles, Bart.	8	1 4	320	..	(31·20)	..	..
D North Newton	D. W. Hurd, Esq.	5	0 9	50	..	28·39	187	134
Aisholt (Timbercombe)	Mrs. J. C. A. White	5	1 2	700	33·2	36·85	..	..
D Bagborough Rectory	C. Hubert Lance, Esq.	9	1 0	470	34·1	35·49	214	161
D Bridgwater (Blake Gardens)	H. P. Bishop, Esq., C.E.	5	3 1	27	28·5	29·88	180	145
d Bridgwater (Wembdon Road)	H. Corder, Esq.	5	1 0	30	29·9	30·58	..	..
D Spaxton (Furzydown)	Mrs. C. Woodhouse	5	1 0	290	..	38·91 ?	182	142
D Over Stowey (Quantock San.)	Medical Superintendent	8	1 0	264	..	35·70	161	146
D Cannington (Ashford)	H. P. Bishop, Esq., C.E.	5	1 1	102	31·4	30·64	175	138

* *Per* Mid-Wessex Rainfall Association.

DIVISION V.—SOUTH WESTERN COUNTIES—(*con.*).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge Height of Rim above Ground.	Rain-gauge Height of Ground above Sea Level.	Average Rainfall.	1928 Rainfall.	1928 Days with ·01 in. or more.	1928 Days with ·04 in. or more.
SOMERSETSHIRE—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
4.—NORTH COAST STREAMS. 158 sq. mi.								
D Washford (Croydon Hall)	Capt. J. W. Bridges	6	1 3	600	41·6	45·55	201	174
D Bicknoller (Ford)	John Tracey, Esq.	5	1 3	150	33·0	34·11	200	165
D Bicknoller (Willett)	H. C. Venning, Esq.	5	1 0	450	35·1	36·44	170	145
D Williton (Aller Farm)	R. G. Hosegood, Esq.	5	2 6	175	32·4	33·52	182	152
D Williton (The White House)	S. L. Rogers, Esq., J.P.	5	1 9	97	30·6	31·68	199	147
D Kilve Court	J. C. Hurle, Esq.	5	1 0	150	30·0	30·94	189	148
D Stogursey	Dr. P. Hallam	5	0 6	140	..	31·80	188	147
D Stogursey (Fairfield House)	Lord St. Audries	5	1 0	150	31·1	31·11	191	146
D Dunster	E. S. Cantle, Esq.	6	1 0	80	..	34·01	193	156
D Minehead (Blenheim Gdns.)	A. Douglas Barron, Esq.	5	1 0	45	..	33·23	192	154
D Porlock (Lynch Mead Allerford)	J. Dyke Acland, Esq.	5	1 3	113	34·6	34·51	226	165
D Porlock (Bush Steep)	Rev. W. P. Holmes	5	0 9	130	43·2	35·14	210	158
d West Porlock (Underway)	N. G. Hadden, Esq.	5	1 0	100	44·2	48·18	168	154
D Culbone (Lillycombe)	E. T. Macdermot, Esq.	5	1 0	1210	50·5	59·18	233	190
5.—EXE. 122 sq. mi.								
D Churchstanton	Mrs Hughes	5	1 0	800	..	36·30	200	143
D Exbridge	G. C. Hartly, Esq.	5	1 0	410	44·1	47·15	223	175
D Brushford Rectory	Rev. B. J. du Boe	5	1 0	450	44·3	49·63	220	187
D Brushford Nurseries	Mr. G. Ruff	5	1 2	430	44·1	46·64	224	178
D Dulverton C. E. School	C. J. R. Weaver, Esq.	5	0 9	550	..	48·77	222	179
D Hawkridge (Liscombe)	Mr. E. W. Darby	5	1 0	980	57·8	64·50	241	213
D Withypool (Comers Cross)	J. Warry, Esq.	5	1 0	1140	..	63·38	218	196
D Cutcombe (Wheddon Cross)	W. J. Tovey, Esq.	5	1 6	945	49·5	56·38	221	185
Exford (North Ley)	F. G. Heal, Esq.	5	1 3	1000	54·8	65·41	..	..
D Exford (Foxcombe)	Cmdr. Q. B. Preston-Thomas, R.N.	5	1 2	1050	53·7	60·35	239	195
Simonsbath	Mrs. A. H. Molland	5	0 10	1080	65·3	75·27	..	..
6.—AXE. 42 sq. mi.								
D Cricket St. Thomas (Cricket Ho.)	Mr. G. F. Richardson	5	1 0	444	39·3	(39·52)	173	144
7.—STOUR. 35 sq. mi.								
D Temple Combe Rectory	Rev. Preb. R.W. Windsor †	5	1 3	215	34·9	35·16	208	153
D Temple Combe (Cheriton Ho.)	W. Wise, Esq.†	..	..	..	31·1	34·87	187	154
D Wincanton (Roundhill Grange)	Maj.-Gen. C. H. P. Ducat	5	1 11	375	32·7	37·27	220	155

DIVISION VI.—WEST MIDLAND COUNTIES.

GLOUCESTERSHIRE. (Area, 1243 sq. mi.)

1.—WYE. 50 sq. mi.								
D Chepstow (Castleford)	Mrs. W. R. Lysaght	5	0 11	146	..	43·88	190	149
D Chepstow (Pen Moel)	F. Hobson, Esq.	5	1 0	240	..	41·32	167	140
D St. Briavels (St. Briavels House)	Surg.Capt.O.W.Andrews, RN.	5	1 0	750	..	50·17	210	156
d Forest of Dean (Mailscot Lodge)	Office of Woods	8	1 4	630	..	(36·17)	..	137
d Forest of Dean (Ruardean H.Lo.)	Office of Woods	8	1 0	932	..	(36·67)	..	..
D English Bicknor (Bicknor House)	T. F. Harvey, Esq.	5	1 0	490	..	36·31	199	142
D Lydbrook (Viaduct House)	G. S. Damsell, Esq.	5	1 0	95	..	33·71	215	140
2.—SEVERN—Right Bank Tributaries. 176 sq. mi.								
D Lydney (Clanna Cottage)	Brig.-Gen. A.M.Tyler, C.M.G.	8	0 10	359	..	45·91	197	145
d Forest of Dean (Blakeney Hill)	Office of Woods	8	1 0	500	..	(37·49)	..	..
d Forest of Dean (Whitemead Pk.)	Office of Woods	8	1 0	200	..	42·24	..	..
D Forest of Dean (Worcester Lo.)	Office of Woods	8	0 11	712	..	41·32	193	149
D Coleford (Cannop Colliery)	J. J. Joynes, Esq.	5	10 0	300	..	39·09	199	139
D Westbury-on-Severn (Elton)	Samuel Bullock, Esq.	5	1 4	85	..	34·05	171	127
D Westbury-on-Severn (Ninnage L.)	Miss N. E. Grant	5	1 0	120	..	33·01	189	130
D Forest of Dean (Edgehills Lodge)	Office of Woods	8	1 0	915	..	40·39	196	156
D Newent (Clifford Manor)	F. F. Grafton, Esq.	5	1 5	310	..	34·34	182	134
D Newent (Taynton)	M. Philips Price, Esq.	5	1 0	50	..	31·45	157	126
D Oxenhall (Dymock Woods)	Office of Woods	8	1 0	232	..	29·68	168	130
D Bromsberrow Heath Pump. Stat.	W. Osborne Thorp, Esq., C.E.	5	1 0	181	..	30·32	152	125
D Tewkesbury (Forthampton Ct.)	Mr. B. Webster	5	1 0	48	..	28·85	200	133
D Tewkesbury (Upper Lode)	J. E. Bradley, Esq.	5	1 0	41	25·2	27·10	186	125

† *Per* Mid-Wessex Rainfall Association.

DIVISION VI.—WEST MIDLAND COUNTIES—(*con.*).

STATIONS.	AUTHORITIES.	Rain-gauge Diam.	Height of Rim above Ground.	Height of Ground above Sea Level.	Average Rainfall.	1928 Rainfall.	Days with ·01 in. or more.	Days with ·04 in. or more.
GLOUCESTERSHIRE—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
3.—SEVERN—Left Bank Tributaries. 372 sq. mi.								
d Thornbury (Thornbury House)	H. V. Gillett, Esq.	5	1 0	110	..	36·69	..	142
D Thornbury (Thornbury Park)	Capt. R. A. Bennett	5	1 3	70	..	37·43	179	143
D Tortworth Court	Mr. J. Banting	8	1 0	264	..	36·18	196	145
D Tortworth School	E. A. Smith, Esq.	5	1 6	264	..	36·51	195	149
D Wotton-under-Edge (Claremont)	R. Penney, Esq.,	5	1 0	350	..	31·03	199	140
D North Nibley (Nibley House)	Lt.-Col. J. D. Buckton, V.D.	5	1 0	380	..	33·17	195	147
D Dursley (The Manor)	Miss H. M. Hutton	5	1 1	274	..	35·91	189	147
D Avening House	Lady Eleanor Byng	8	1 3	350	..	36·05	175	149
D Avening (Gatcombe)	Colonel H. G. Ricardo	8	1 0	550	..	36·67	173	157
D Berkeley Castle Gardens	Mr. T. B. Ashbee	5	1 6	60	..	36·87	173	145
D Nailsworth (Three Corners)	F. R. Rushton, Esq.	5	0 9	325	..	37·29	203	155
D Berkeley (Sharpness Docks)	F. G. Marling, Esq.	5	1 3	50	..	38·40	199	140
D Minchinhampton (The Shard)	E. H. Denne, Esq.	5	0 8	500	..	37·20	195	145
D Minchinhampton (Rectory Cott.)	G. W. Fisher, Esq.	5	1 0	610	..	37·39	203	149
D Minchinhampton (Camp Field)	Miss B. M. Legh	5	1 6	640	..	40·67	203	152
D Frocester Manor	Capt. J. E. H. Graham-Clarke	5	1 6	80	..	27·31	173	129
D Stroud (Stanley Park Gdns.)	Sir P. S. Marling, Bt., V.C., C.B.	8	1 0	200	..	40·19	177	162
D Stroud (Rodborough)	Rev. W. A. Jones	5	1 0	400	..	33·54	194	139
D Stonehouse (Wycliffe College)	W. A. Sibly, Esq.	5	1 6	120	..	29·32	179	129
D Bisley (Jaynes Court)	Hugh T. Coles, Esq.	5	0 11	777	..	33·30	220	146
Stroud (Berrimans)	E. Armitage, Esq.	5	1 0	750	..	36·69	..	..
D Stonehouse (Parklands)	W. Grey Robinson, Esq. J.P.	5	2 6	103	..	29·50	186	136
M Stroud (Lypiatt Park)	Mr. A. J. Buck	5	1 0	820	..	33·91	..	..
D Whitminster (The Junction)	A. J. Cullis, Esq., C.E.	5	1 0	32	..	34·85	189	135
D Haresfield Court	Mrs. Tidswell	5	0 10	100	..	35·78	191	153
D Harescombe Grange	Stamford Hutton, Esq.	5	1 0	557	30·7	30·20	193	125
D Quedgeley House	Miss M. F. Curtis-Hayward	5	1 3	65	27·9	31·14	210	136
D Witcombe Reservoir	C. J. Scudamore, Esq.	8	3 0	297	..	29·98	182	133
D Brockworth (The Kia)	Mrs. Grace Buckle	5	1 4	220	..	28·44	178	126
D Gloucester (The Park)	R. H. Ellis, Esq.	8	1 3	56	..	28·72	189	127
d Gloucester (Llanthony Lock)	J. E. Bradley, Esq.	5	1 2	39	..	28·43	..	122
D Gloucester (Maisemore Lock)	J. E. Bradley, Esq.	5	1 1	39	..	27·92	177	128
D Churchdown (Barrow Hill)	Mrs. J. H. Jones	5	1 0	225	..	29·55	193	119
D Dowdeswell Reservoir	J. S. Pickering, Esq., C.E.	5	1 3	357	..	29·57	168	131
D Cheltenham (Thirlestane Hl) (R)	J. Player, Esq.	8	2 0	240	..	29·51	188	119
D Charlton Kings (The Grange)	Miss E. M. Heberden	5	0 9	300	..	30·66	208	134
D Cheltenham (Hewletts Res.)	J. S. Pickering, Esq., C.E.	8	1 6	419	..	29·46	192	130
D Cheltenham (Sandford Mead)	J. S. Pickering, Esq., C.E.	5	2 6	210	..	27·48	180	126
D Cheltenham (Montpellier Gds.)*	Lt.Cmr. J. Orgee, D.S.C., R.N.	5	1 0	214	26·5	26·21	187	126
D Cheltenham (Suffolk Square)	Rev. Preb. H. T. Williamson	5	1 0	227	..	25·07	181	122
D Cheltenham (Swindon)	J. C. M. Stanton, Esq.	8	1 2	136	..	26·17	194	127
D Cheltenham (Cleeve Hill)	C. H. Bastow, Esq.	8	3 0	660	..	26·71	197	136
D Tewkesbury Pumping Station	J. S. Pickering, Esq., C.E.	5	1 0	47	..	25·50	190	130
4.—SEVERN—Upper Avon. 99 sq. mi.								
D Winchcombe (Sudeley Castle)	Major J. H. D. Brocklehurst.	5	1 0	357	..	28·96	178	136
D Broadway (Buckland Manor)	Mr. J. Whiteley	5	1 0	300	..	27·15	176	141
D Mickleton (Bank House)	M. J. Salter, Esq.	5	1 0	250	25·0	24·24	193	124
5.—LOWER AVON & C. 198 sq. mi.								
D Bath (Monkswood Reservoir)	Philip Porteous, Esq., C.E.	5	1 6	365	..	36·94	213	145
D Bristol (Tyndalls Pk. Rd.) (+A)	Maj. E. J. Dunscombe, R.F.A.	5	1 4	150	..	38·22	204	144
D Bristol (Redland)	H. A. Rogers, Esq.	5	1 6	180	..	36·48	195	141
D Clifton (Oakfield Road)	J. A. McPherson, Esq., C.E.	5	1 0	200	..	37·77	184	138
Bristol (St. Andrew's Park)	H. Vicars Webb, Esq.	5	1 6	200	..	37·00	..	136
D Filton	F. W. Gayner, Esq.	5	1 0	200	..	34·35	189	139
Winterbourne (Kendleshire)	J. Marsh, Esq.	5	1 0	170	..	30·30	..	..
D Frampton Cotterell (Park Ho.)	H. H. Harding, Esq.	5	1 0	158	..	33·55	202	139
D Chipping Sodbury (Horton Hall)	Colonel P. Burges	5	1 0	380	31·5	35·50	188	145
Almondsbury (Ridgewood)	R. E. Potter, Esq.	5	0 8	200	..	34·87	171	138
6.—THAMES—Right Bank Tributaries. 15 sq. mi.								

* Formerly known as Cheltenham (High St.).

DIVISION VI.—WEST MIDLAND COUNTIES—(*con.*).

	STATIONS.	AUTHORITIES.	Rain-gauge Diam.	Height of Rim above Ground.	Height of Ground above Sea Level.	Average Rainfall.	1928 Rainfall.	Days with ·01 in. or more.	Days with ·04 in. or more.
	GLOUCESTERSHIRE—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
	7.—THAMES—Windrush & c. 333 sq. mi.								
d	Somerford Keynes (Manor Ho.)	F. Fawcett, Esq.	5	0 10	450	..	28·86	(176)	(135)
D	Fairford (Dunfield, Kempsford)	A. T. Iles, Esq.	5	1 0	260	25·6	29·92	185	146
D	Maisey Hampton (The Nest)	W. L. Stanton, Esq.	5	1 1	345	..	31·14	190	141
D	Fairford Vicarage	Rev. Canon R. C. S. Jones	5	1 0	280	..	30·30	192	144
	Lechlade (St. John's Lock)	Thames Conservancy	5	1 0	236	..	26·76	188	134
D	Lechlade (Claydon House)	T. T. S. Metcalfe, Esq.	5	1 0	250	..	27·24	193	130
D	Cirencester (Cripps Mead)	Mrs. Wilfred Cripps	8	0 8	366	..	33·93	211	143
D	Cirencester (Argyll House)	Prof. E. Blundell	5	2 6	325	..	32·74	157	128
D	Cirencester (Gwynfa)	Nigel Woods, Esq.	5	1 0	354	30·8	34·81	205	141
D	Daglingworth Manor	J. Herbert Scrutton, Esq.	8	0 10	450	..	33·52	184	143
D	Cirencester (Barnsley Pk.)	H. W. Wykeham-Musgrave, Esq.	5	0 10	495	..	35·01	214	144
D	Aldsworth	T. Rich, Esq.	5	1 6	430	..	30·92	169	126
D	Great Barrington	H. J. Barrett, Esq.	5	1 6	417	..	30·45	190	133
D	Northleach (Sherborne House)	Mr. A. Mitchell	5	1 0	420	30·7	30·85	160	136
D	Northleach (Leygore Manor)	Arthur E. Moss, Esq.	5	1 0	650	..	29·86	208	135
D	Bourton-on-Water (Eastfield)	E. W. Kendall, Esq.	5	1 6	434	..	30·99	188	139
	Bourton-on-Water (Chardwar)	G. F. Moore, Esq.	5	1 0	430	..	30·89	181	134
D	Stow-on-the-Wold (Icomb Place)	Capt. G. H. Simpson Hayward	8	1 3	500	..	31·56	179	143
D	Winchcombe (Temple Guiting Ho.)	Major C. Stacey	5	1 3	700	..	31·80	211	151
	HEREFORDSHIRE. (Area, 840 sq. mi.)								
	1.—WYE. 685 sq. mi.								
D	Goodrich Court Gardens	Mrs. G. R. Trafford	5	1 7	200	29·7	32·90	175	150
D	Walford (Hill Court)	G. R. Trafford, Esq.	5	1 1	161	28·4	30·52	191	129
D	Ross (County Observatory)	F. J. Parsons, Esq.	5	1 0	223	27·4	29·11	182	131
D	Ross (Birchlea)	Miss M. L. Southall	5	1 0	210	28·2	30·40	199	135
D	Bridstow (Ashe Leigh)	Major W. Stanley R. Cox	5	1 0	220	27·4	28·76	161	134
D	Kentchurch Rectory	Rev. R. P. Dansey	5	1 0	220	34·6	36·32	203	142
D	Ross (The Chantry)	M. F. Maclean, Esq.	5	0 10	475	..	26·85	198	144
D	Perrystone Court	Major-Gen. G. S. Clive, D.S.O.	5	1 3	450	25·5	27·06	157	124
	Brockhampton Court	Lt.-Col. A. W. Foster	8	2 3	500	27·7	28·42	..	..
D	Fownhope (Morney Cross)	A. P. Maudslay, Esq., D.Sc.	5	1 0	200	..	29·83	213	136
D	Vowchurch (Ladywell House)	A. S. Wood, Esq.	5	1 0	400	34·9	38·15	198	148
D	Hereford (Belmont Abbey)	The Prior	8	1 0	291	27·6	25·90	171	128
D	Hereford (Barton House)	Rev. A. G. Jones	8	1 0	179	26·3	27·26	201	134
D	Hereford (Breinton Court)	H. A. Wadworth, Esq.	5	1 0	238	25·9	25·73	185	128
	Hereford (Barton Road)	W. Cooke, Esq.	8	1 0	190	26·2	29·77	..	..
D	Dorstone (Oaklands)	Robert Gray, Esq.	5	1 0	486	..	40·57	203	153
D	Hereford (Holmer Hall)	Miss M. S. Hopton	8	1 3	244	25·1	27·52	199	136
	Tyberton Court	Major C. B. L. Warner	5	0 10	276	..	31·92	168	143
D	Credenhill (Stretton Sugwas)	Capt. S. H. Armitage	5	1 0	226	25·8	27·50	189	131
D	Credenhill	F. E. Whiting, Esq.	5	1 5	275	27·5	27·24	156	122
D	Burghill	F. Boddington, Esq.	5	1 0	310	..	24·77	176	116
D	Ocle Pychard (Ocle Court)	G. Creswell, Esq.	8	1 0	298	27·8	28·26	223	140
D	Sarnesfield Court	Rev. W. Marshall	5	1 0	378	..	30·39	176	130
D	Weobley School	A. J. Dean, Esq.	5	1 0	320	29·5	32·55	221	146
D	Dilwyn (Townsend House)	Dr. T. Lambert Hall	5	0 8	290	27·6	30·54	172	134
D	Pembridge (Burton Court)	Mrs. P. Clowes	5	1 6	400	28·4	31·00	205	151
D	Bromyard (Birchyfields)	Lt.-Col. J. E. Knott, D.S.O.	5	1 3	545	..	28·08	171	139
D	Bromyard (Dumbleton Cottage)	T. V. Philpott, Esq.	5	1 0	392	29·0	28.92	189	131
D	Kington (Lynhales)	Mrs. R. F. Hibbert	5	1 0	620	..	36·36	201	144
D	Kington (The Ovals)	S. Robinson, Esq.	5	0 8	700	..	36·46	208	158
d	Pembridge (Moor Court)	C. A. Benn, Esq.	5	2 1	400	..	32·17	..	..
D	Kington (Hill Court)*	J. E. Barendt, Esq.	5	0 8	595	..	39·91	213	163
M	Kington (Sunset)	H. Langston, Esq.	5	1 6	495	32·0	35·08	..	..
d	Kington (Golf Club)	C. A. Benn, Esq.	5	0 3	1284	..	(39·31)	..	..
D	Humber Rectory	Rev. B. G. Way	5	1 6	450	30·9	29·73	194	147
D	Leominster (Hennor)	Capt. L. R. Hibbert	5	1 1	440	..	28·52	201	141
D	Leominster (Fairholme)	E. B. Reynolds, Esq.	5	0 9	285	..	30·07	187	143
D	Kimbolton (Grantsfield)	J. M. Hutchinson, Esq.	5	1 0	424	28·4	31·09	197	144
d	Evton (Old Hall)	R. H. Evans, Esq.	5	0 9	310	27·9	30·53	..	..

* Formerly known as Montfort House.

DIVISION VI.—WEST MIDLAND COUNTIES—(*con.*).

STATIONS.	AUTHORITIES.	Rain-gauge Diam.	Height of Rim above Ground.	Height of Ground above Sea Level.	Average Rainfall.	1928 Rainfall.	Days with ·01 in. or more.	Days with ·04 in. or more.
HEREFORDSHIRE—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
2.—SEVERN.—Right Bank Tributaries. 155 sq. mi.								
D Ledbury (Donnington Hall)	Col. C. Spence-Colby, C.M.G.	5	1 0	..	..	30·43	160	131
D Much Marcle (The Mount)	Miss A. M. Charles	5	1 0	240	25·8	27·28	180	132
d Much Marcle (Hall Court)	Mrs. J. J. S. Powell	5	1 0	200	..	27·71	158	128
D Ledbury (Underdown)	S. H. Bickham, Esq.	5	1 0	307	27·1	29·33	184	135
Ledbury (Munsley)	John Riley, Esq.	5	1 0	330	..	30·57	192	134
D Colwall (The Downs)	F. M. Day, Esq.	5	1 0	500	..	29·07	171	125
Cradley (Mill Bank)	Lt.-Col. E. H. Thurlow	5	1 0	320	28·4	27·72	..	..
D Brampton Bryan	J. R. H. Harley, Esq.	8	1 2	450	..	37·12	194	156
d Leintwardine	E. Charnock, Esq.	5	1 6	450	31·9	38·13	(219)	(166)
D Whitbourne School	M. Hall, Esq.	5	1 0	200	..	25·27	174	128
SHROPSHIRE. (Area, 1343 sq. mi.)								
1.—MERSEY.—Weaver. 27 sq. mi.								
2.—DEE. 30 sq. mi.								
D Whitchurch (Fenns Bank)	M. W. Sowden, Esq., C.E.	8	1 0	271	27·1	31·29	203	153
D Overton (Sodylt Hall)	W. H. Horsfall, Esq.	5	1 0	266	29·7	35·74	183	164
3.—SEVERN.—Right Bank Tributaries. 722 sq. mi.								
d Ludlow (Southcot)*	C. T. Marston, Esq.	5	1 0	399	..	32·51	..	137
D Bromfield (Oakley Park)	Mr. J. R. Francis	5	1 0	300	29·7	32·83	190	152
D Bromfield (Warwick House)	F. Brayshaw, Esq.	5	1 0	320	30·3	32·27	218	157
D Bitterley Rectory	Rev. Preb. J. R. Burton	5	1 6	509	28·1	30·86	201	151
D Stanton Lacy Vicarage	Miss I. Armitage	5	1 0	304	28·1	32·41	206	158
M Llanfairwaterdine (The Green)	The Meteorological Office.	5	1 0	950	31·8	39·65	..	..
D Clun (Trinity Hospital)	Rev. T. W. B. Thomas	5	1 0	650	..	39·42	171	160
D Culmington Manor	T. W. Shaw, Esq.	5	1 4	580	29·6	32·34	179	145
D Wistanstow	J. W. Clarke, Esq.	8	1 0	480	..	34·26	195	145
D Burwarton Hall	Rt. Hon. Viscount Boyne	5	0 9	894	33·6	38·07	179	162
D Lydbury North (Totterton H.)	Major W. H. B. Whitaker	5	1 6	700	30·8	31·79	189	148
D Bishops Castle (Castle Street)	E. Griffiths, Esq.	5	1 0	720	31·0	34·37	196	168
D Church Stretton (Sewage Works)	E. J. Marsh, Esq.	5	1 0	582	33·7	37·42	230	162
D Church Stretton (St. Margaret's)	Rev. J. H. Kidson	5	0 11	672	..	38·66	223	166
D Bridgnorth (Cantreyn)	W. Bayliss, Esq.	5	1 0	290	26·7	28·31	189	146
D Chirbury (Marrington Hall)	Lt.-Col. S. D. Price-Davies.	5	1 0	490	29·5	30·10	188	148
D Church Preen (Preen Cottage)	Miss Edith Hopkins	5	1 0	760	29·1	31·40	178	150
D Church Stretton (Wolstaston)	Rev. Alan Clover, M.A.	5	1 0	795	31·9	38·31	194	156
D Much Wenlock (Willey Park)	Col. Lord Forester	5	3 0	492	28·2	30·84	209	149
D Dorrington School	J. A. Narraway, Esq.	5	1 2	250	..	33·52	250	163
D Shrewsbury (Beckbury House)	G. H. Horsfall, Esq.	5	0 9	220	22·1	26·52	193	150
D Shrewsbury (Radbrook Hall)	Major D. D. Macpherson, J.P.	5	0 8	235	24·3	28·43	208	144
D Shrewsbury (Longden Road)	W. Deedes, Esq.	5	1 6	250	..	26·03	178	133
4.—SEVERN.—Left Bank Tributaries. 564 sq. mi.								
Bridgnorth (Coton Hall)	Capt. W. Colville	5	1 6	460	27·8	28·61	190	147
D Bridgnorth (Quatt)	G. C. Wolryche-Whitmore, Esq.	5	1 0	250	..	27·94	199	148
D Ackleton (The Folley)	H. J. Bath, Esq.	5	1 0	230	..	27·71	214	141
Ackleton House	F. J. Neale, Esq.	8	1 3	270	..	27·22	196	..
D Shifnal (Hatton Grange)	Mr. G. Risebrow	5	3 6	262	26·1	27·84	204	145
D Shifnal (Cosford W. W.)	B. L. McMillan, Esq., C.E.	5	0 11	222	..	26·86	181	136
D Shifnal (National Schools)	T. F. Chard, Esq.	5	1 5	283	28·2	29·67	180	136
D Wellington W.W. (Wrekin Res.)	W. Walker, Esq.	6	2 6	478	25·7	31·96	172	144
D Shrewsbury (Coton Hill)	Dr. M. Gepp	5	1 0	190	22·1	25·06	188	139
D Shrewsbury (Roden)	J. W. Nowell, Esq.	8	1 2	207	25·2	26·92	204	138
Shrewsbury (Fitz Rectory)	Rev. W. Brewster	5	1 2	238	26·2	28·03	199	..
D Newport (Aston Hall)	Col. R. Leeke	5	0 11	280	27·7	29·07	205	140
D Hadnall School	E. Lawrence Bingham, Esq.	8	3 0	252	..	31·58	223	167

* Formerly known as Ludlow (Gravel Hill)

DIVISION VI.—WEST MIDLAND COUNTIES—(*con.*).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge: Height of Rim above Ground.	Rain-gauge: Height of Ground above Sea Level.	Average Rainfall.	1928: Rainfall.	1928: Days with ·01 in. or more.	1928: Days with ·04 in. or more.
SHROPSHIRE—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
4.—SEVERN—Left Bank Tributaries—(*con.*)								
D Newport (Agricultural College)	The Principal	5	1 0	220	24·8	27·47	196	142
D Newport (Chetwynd Park)	Mrs. Burton Borough	5	1 0	240	28·3	30·87	209	159
D Grinshill (Sansaw Hall Gardens)	Capt. F. B. Bibby	5	0 10	300	25·7	33·25	202	175
D Myddle (Marton Hall)	Major R. W. Doyne	5	1 0	280	27·4	31·72	186	168
D Cheswardine (Knighton Res.)	Canal Engineer, L.M.&S.R.	8	1 0	351	30·0	33·90	202	153
D Cheswardine Hall	Col.R.C.Donaldson-Hudson	5	1 6	530	28·6	32·12	198	147
D Oswestry (Mount Res.)	G. W. Lacey, Esq., C.E.	5	1 0	698	34·5	43·13	227	176
D Oswestry (Council School)	E. Compton, Esq.	5	1 0	450	..	42·42	208	174
d Ellesmere	Canal Engineer, L.M.&S.R.	8	1 0	368	28·6	(35·85)	..	..
D Norton-in-Hales School	Chas. Chadwick, Esq.	5	1 3	350	30·5	35·82	259	180
STAFFORDSHIRE. (Area, 1171 sq. mi.)								
1.—MERSEY—Weaver. 50 sq. mi.								
2.—SEVERN—Left Bank Tributaries. 160 sq. mi.								
D Kinver (Prestwood)	F. J. Dixon, Esq., C.E.	5	1 0	179	..	25·47	184	130
D Kingswinford (Ashwood P.S.)	F. J. Dixon, Esq., C.E.	5	1 0	207	24·9	27·21	174	137
D Dudley (Shavers End)	F. J. Dixon, Esq., C.E.	5	1 0	745	..	27·51	185	138
D Penn (Church Hill)	Rev. H. N. Fowler	5	1 1	500	..	26·79	204	136
Wolverhampton (Copthorne Rd)	Kenneth C.Berrington,Esq.	5	0 9	500	26·6	28·32	198	139
D Wolverhampton (West Park)	Dr. R. H. H. Jolly	5	0 10	430	27·1	27·07	213	139
D Wolverhampton(MerridaleGro.)	H. Hodgkinson, Esq.	5	1 4	..	..	25·63	167	141
D Tettenhall (The Hollies)	R. C. Sikes, Esq., C.E.	5	1 0	355	26·7	28·17	227	134
D Tettenhall Waterworks	B. L. McMillan, Esq.	5	0 10	468	..	27·40	206	131
D Patshull Park	Earl of Dartmouth, K.C.B.	8	0 6	279	26·8	28·22	188	142
D Shifnal (Weston Park)	Earl of Bradford	5	1 6	400	27·3	30·86	225	152
D Norbury Junction	Canal Engineer, L.M.&S.R.	8	1 0	332	28·0	31·68	202	147
D Market Drayton (Old Springs)	F. E. Harding, Esq.	5	1 8	422	28·9	31·94	209	149
D Maer Hall Gardens	Miss Harrison, M.B.E.	8	1 6	390	32·5	37·11	166	146
D Mucklestone(WilloughbridgeLo.)	M. D. Hill, Esq.	5	0 9	450	..	33·20	197	154
3.—TRENT—Right Bank Tributaries. 518 sq. mi.								
D West Bromwich	(+A)A.D.Greatorex, Esq., C.E.	8	1 7	543	26·1	30·00	186	137
D Wednesbury (Ocker Hill)	H.K.S.Woodhouse,Esq.,C.E.	5	1 0	476	24·8	27·12	187	122
D Walsall (Bescot Sewage Farm)	J. Taylor, Esq., C.E.	8	0 11	376	26·9	30·42	222	129
D Walsall (Wednesbury Sew. Wks)	G. Wicks, Esq.	5	1 0	378	27·9	27·08	182	123
D Walsall (Gorway)	J. Cleland, Esq.	5	1 0	440	..	28·13	171	131
D Darlaston (Sewage Works)	S. E. Hammonds, Esq.	8	1 6	393	..	26·09	170	129
D Bilston (The Lunt Outfall)	A. F. B. Sidwick, Esq., C.E.	8	1 0	423	27·3	27·86	193	126
D Aldridge (Bourne Vale)	F. J. Dixon, Esq., C.E.	5	1 0	419	25·1	27·25	170	132
D Shenstone (Little Hay)	F. J. Dixon, Esq., C.E.	5	1 0	298	..	26·83	165	126
D Bloxwich (Sneyd Reservoir)	H.K.S.Woodhouse,Esq.,C.E.	5	1 0	507	25·5	29·28	218	133
D Brownhills	S. Harrison, Esq., C.E.	8	1 0	492	26·8	28·86	198	134
D Brewood (Slade Heath P.S.)	F. J. Dixon, Esq., C.E.	5	1 0	340	24·9	27·42	184	135
D Hammerwich(CannockCh.Res.)	H.K.S.Woodhouse,Esq.,C.E.	5	1 0	475	25·3	29·46	206	151
D Brewood (Belvide Reservoir)	Canal Engineer, L.M.&S.R.	5	1 0	367	..	27·84	200	136
D Lichfield (St. John Street)	Dr. F. M. Rowland, C.B.E.	5	1 0	269	27·5	25·87	179	118
D Hednesford (Scout House)	F. J. Dixon, Esq., C.E.	5	1 0	750	..	25·48	192	127
D Rugeley (Longdon Lodge)	F. J. Dixon, Esq., C.E.	5	1 0	413	26·1	27·64	162	132
D Lichfield (Hanch Reservoir)	F. J. Dixon, Esq., C.E.	5	1 0	259	..	26·39	173	125
D Rugeley (Brindley Bank)	F. J. Dixon, Esq., C.E.	5	1 0	254	26·3	28·56	177	135
D Milford Waterworks	W. Plant, Esq., C.E.	5	1 0	246	27·5	31·24	195	142
D Shugborough	The Earl of Lichfield	5	1 3	260	30·1	35·25	209	149
D Stafford (Corporation Depot)	W. Plant, Esq., C.E.	5	1 6	249	27·2	32·06	201	155
D Eccleshall (Johnson Hall)	Major W. Moat	5	1 2	400	27·5	31·34	198	152
D Stone (Meece House)	Mr. W. Lygo	5	1 6	331	28·3	34·37	193	152
D Stone (Meaford Hall)	Lt.-Col. W. S. W. Parker Jervis, D.S.O.	5	0 10	325	29·9	38·62	225	166
D Standon (Hatton W.W.)	R. C. Frain, Esq., C.E.	5	1 0	355	29·0	36·01	207	162
D Basford (Sewage Works)	Thomas Dunn, Esq.	5	1 0	385	..	34·30	205	155

DIVISION VI.—WEST MIDLAND COUNTIES—(*con.*).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge: Height of Rim above Ground.	Rain-gauge: Height of Ground above Sea Level.	Average Rainfall.	1928: Rainfall.	1928: Days with ·01 in. or more.	1928: Days with ·04 in. or more.
STAFFORDSHIRE—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
4.—TRENT—Left Bank Tributaries. 193 sq. mi.								
D Burton Reservoir	F. J. Dixon, Esq., C.E.	5	1 0	309	25·1	26·97	188	140
D Burton (Shobnall)	Messrs. Bass & Co., Ltd.	5	1 0	157	24·6	25·69	194	136
D Stone (Alleyne's Grammar Sch.)	H. Malcolm Fraser, Esq.	5	1 6	415	29·4	35·36	205	156
D Stone (Idlerocks)	Mrs. Wedgwood	5	1 0	740	32·7	39·99	199	172
D Longton (The Meir)	R. C. Frain, Esq., C.E.	5	1 0	617	30·2	36·10	195	154
D Fenton (Sew. Works)	(A) W. H. Makepeace, Esq., C.E.	6	1 0	350	..	34·71	210	146
5.—TRENT—Dove. 250 sq. mi.								
D Uttoxeter (The Gendalls)	W. Ellaway Smith, Esq.	5	1 0	420	..	33·19	195	154
D Rocester (Dove Leys)	Sir Percival Heywood, Bt.	5	1 6	350	33·5	38·87	193	157
D Oakamoor (Lightoaks)	M. A. Bolton, Esq.	5	1 9	650	..	40·54	211	161
D Ashbourne (Mayfield Hse.)	(+A) Graham C. Lawson, Esq.	8	1 0	374	32·3	40·11	211	152
d Ilam School	J. R. McKnight, Esq.	5	0 8	500	..	(47·58)	..	..
D Cheddleton (County Mental Hosp.)	Mrs. Menzies	5	1 0	550	..	42·67	212	163
D Alstonfield (The Manor)	B. R. S. Pemberton, Esq.	5	1 0	925	39·1	46·42	224	168
D Leek (Wall Grange P. Stn.)	R. C. Frain, Esq., C.E.	5	1 0	457	34·7	37·53	206	157
D Leek (Hillesdon)	A. Y. Worthington, Esq.	5	1 0	750	37·2	41·67	233	164
D Leek (Haregate Hall)	Mr. R. Sutton	5	0 9	680	36·9	41·89	215	166
M Leek (Swains Moor)	W. E. Beacham, Esq.	5	1 1	994	..	47·59	..	..
M Leek (Withens, Upper Hulme)	W. E. Beacham, Esq.	5	1 1	1085	..	42·79	..	..
WORCESTERSHIRE. (Area, 751 sq. mi.)								
1.—SEVERN—Right Bank Tributaries. 231 sq. mi.								
D Redmarley (Haselden)	Miss F. L. Newbury	5	0 5	280	25·3	29·40	182	137
D Upton-on-Severn (Willow Bank)	J. Selwyn Cowley, Esq.	5	1 0	41	26·0	28·78	196	122
D Upton-on-Severn (The Eades)	Roger D. Tennant, Esq.	5	0 9	100	26·9	28·33	187	125
D Malvern (British Camp Res.)	W. Osborne Thorp, Esq., C.E.	5	1 0	677	28·5	26·93	166	118
D Malvern (Madresfield Road)*	W. Osborne Thorp, Esq., C.E.	5	1 0	202	28·5	28·82	176	122
§D Malvern (Belle Vue House)	A. Mander, Esq.	5	4 0	520	29·4	30·43	191	134
D Malvern (Free Library)	W. Osborne Thorp, Esq.	5	1 0	377	28·4	28·63	181	126
D Malvern (Clarence Road)	S. Bottomley, Esq.	5	1 0	300	27·7	28·12	202	133
D Malvern (Hornyold Road)	Rev. T. Wolseley Lewis	5	1 0	498	28·3	30·72	190	132
D West Malvern	W. Osborne Thorp, Esq., C.E.	5	1 0	832	28·9	27·26	167	129
D Knightwick Sanatorium	Dr. H. Gordon-Smith	5	1 0	300	25·9	26·78	189	133
D Worcester (Diglis Lock)	J. E. Bradley, Esq.	5	1 0	49	24·7	24·59	184	123
D Worcester (St. John's School)	E. R. Bowen, Esq.	5	1 0	82	24·4	25·52	166	127
D Martley Rectory	Rev. J. F. Hastings	5	1 0	220	26·7	26·27	194	139
D Ombersley (Holt Lock)	J. E. Bradley, Esq.	5	1 1	55	25·3	24·72	181	132
D Stanford Rectory	Rev. J. B. Hewitt	5	1 1	360	28·4	28·59	164	130
D Stourport (Astley Town)	J. Armytage Batley, Esq.	5	0 11	175	25·5	25·85	187	131
D Tenbury (Belle Vue)	F. Lowe, Esq.	5	1 0	313	26·3	28·95	182	139
D Rochford Rectory	Rev. Allan Ellison	5	1 0	315	27·7	29·41	195	146
D Stockton-on-Teme (Eardiston)	Miss M. Wallace	5	1 0	200	26·7	26·37	177	137
D Bewdley (Winterdyne)	Miss K. M. Sturt	5	1 0	175	25·9	26·96	224	141
2.—SEVERN—Left Bank Tributaries 194 sq. mi.								
D Earl's Croome (Levant Lodge)	F. W. Burnett, Esq.	5	2 0	110	26·3	26·95	178	126
D Kempsey (Napleton Ho.)	Major H. Berkeley Hill	5	1 3	100	26·9	25·33	146	117
D Kempsey Vivarage	Rev. E. B. R. de Jersey	5	0 9	50	..	27·51	185	127
Worcester (London Road)	Mrs. Manley Power	5	1 0	150	25·2	26·10	192	..
D Worcester (Waterworks)	W. Ransom, Esq., C.E.	5	1 0	52	23·2	25·09	205	135
D Worcester (Perdiswell)	The Agricultural Organiser	5	1 0	95	..	22·31	153	120
D Worcester (Bevere Lock)	J. E. Bradley, Esq.	5	1 1	52	24·5	24·17	178	129
D Droitwich (Friar Street Depot)	Chas. T. Butler, Esq. C.E.	12	4 0	98	25·4	26·04	182	136
D Bromsgrove (Tardebigge Res.)	A. J. Cullis, Esq., C.E.	5	4 6	455	27·5	28·92	197	145
D Bromsgrove (Burcot P. S.)	R. S. Broadley, Esq.	8	0 9	439	..	28·88	175	140
D Barnt Green (Upwood)	Miss M. Gibbins	5	0 9	650	..	28·45	198	148
D Stourport (Lincombe Lock)	J. E. Bradley, Esq.	5	1 0	62	25·6	28·10	183	178
D Bewdley (C.E. School)	J. Bates, Esq.	8	1 0	80	26·4	27·28	184	136

§ Exposure not orthodox.
* Formerly called (Church Street).

DIVISION VI.—WEST MIDLAND COUNTIES—(*con.*).

	STATIONS.	AUTHORITIES.	Diam.	Rain-gauge Height of Rim above Ground.	Height of Ground above Sea Level.	Average Rainfall.	1928 Rainfall.	Days with .01 in. or more.	Days with .04 in. or more.
	WORCESTERSHIRE—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
	2.—SEVERN—Left Bank Tributaries—(*con.*).								
d	Kidderminster (Pumping Stn.)	J. T. Cowderoy, Esq.	5	1 0	103	..	(26·38)	(181)	(133)
D	Kidderminster (Park Hall)	K. H. Wilson, Esq.	5	1 0	200	25·7	25·69	181	129
D	Bewdley (Elan Aqueduct)	F. W. Macaulay, Esq., C.E.	5	1 0	91	26·7	30·07	213	149
D	Halesowen (Romsley)	F. J. Dixon, Esq., C.E.	5	1 0	614	30·6	30·47	193	144
D	West Hagley (Glenthorpe)	W. Nock, Esq.	5	1 0	400	28·1	27·37	198	138
D	Pedmore (The Dene)	T. Grazebrook, Esq.	5	0 9	340	26·5	26·41	183	151
D	Stourbridge (Pumping Station)	G. P. Deeley, Esq.	8	1 0	212	27·1	28·74	183	140
D	Netherton (Lodge Farm Res.)	H.K.S.Woodhouse,Esq.,C.E.	5	1 0	445	..	26·30	207	132
D	Dudley (Borough Cemetery)	F. H. Gibbons, Esq., C.E.	5	1 3	591	..	26·47	166	127
	3.—SEVERN—Upper Avon. 260 sq. mi.								
d	Blockley (Upton Wold)	E. W. Arkell, Esq.	5	1 0	800	30·5	(30·32)	..	..
D	Blockley	Miss E. M. Richardson	5	1 0	500	..	29·16	178	127
	Bredon (The Croft)	Jasper Lambert, Esq.	5	1 1	120	24·5	28·03	192	139
D	Defford (Upper St.)	A. W. Butler, Esq.	5	5 6	105	24·0	24·20	171	127
D	Evesham (Bengeworth)	Messrs. Ross Bros., Ltd.	5	1 0	128	22·9	24·82	167	123
D	Evesham (Lansdowne)	Miss E. M. Burlingham	5	1 0	108	23·4	28·73	156	137
D	Evesham (Sewage Works)	J. Abbott, Esq., C.E.	8	3 0	86	22·6	23·92	175	114
D	Evesham (Worcester Rd.)*	H. B. Pollard, Esq.	5	1 0	..	22·6	23·39	165	114
D	Tredington	N. H. Walton, Esq.	5	1 0	200	..	24·91	184	122
D	Pershore (Southern House)	Rev. F. R. Lawson	5	2 3	70	22·2	24·30	189	125
D	Pinvin (The Nurseries)	G. H. Channell, Esq.	5	1 6	118	..	28·73	164	134
	Alcester (Cookhill Co. School)	T. Barber, Esq.	5	1 0	400	24·5	24·43	182	..
D	Redditch (Hewell Gardens)	Mr. F. Molyneux	5	1 0	469	27·7	29·08	161	142
D	Alvechurch (Bordesley Hall)	A. H. Wiggin, Esq.	12	4 0	490	28·5	29·51	180	149
D	Alvechurch (Fairfield)	D. McMichael, Esq., J.P.	5	1 0	400	29·4	29·17	161	136
D	Bromsgrove (Lower Bittal Res.)	A. J. Cullis, Esq.	5	3 0	457	..	28·55	215	151
	4.—THAMES—Windrush & c. 10 sq. mi.								
	5.—TRENT—Right Bank Tributaries. 56 sq. mi.								
D	Halesowen (Frankley)	F. W. Macaulay, Esq., C.E.	5	0 10	570	30·7	31·68	197	154
D	Northfield (Frankley Lodge Rd.)	A. A. Barnes, Esq.	5	1 0	548	..	32·19	202	148
	WARWICKSHIRE. Area, 902 sq. mi.)								
	1.—SEVERN—Upper Avon. 603 sq. mi.								
D	Long Compton (Weston Park)	Mrs. H. A. Warriner	8	1 0	510	26·5	27·13	157	131
d	Kineton (Kineton House)	J. Fielden, Esq., J.P.	5	1 7	250	..	24·93	..	130
D	Stratford-on-Avon (Milcote)	F. W. Jones, Esq., C.E.	5	1 6	122	23·6	22·88	166	119
D	Stratford-on-Avon (Avonfield)	G. W. Everard, Esq.	5	0 8	120	24·2	23·63	182	126
D	Stratford-on-Avon(Shottery Hall)	R. C. Carter, Esq.	8	1 0	140	23·9	26·67	182	129
D	Bidford (Moor Hall) (+A)	E. H. Cubberley, Esq.	5	1 0	125	24·0	22·86	183	129
D	Temple Grafton Court	T. Lonsdale, Esq.	8	1 0	270	24·8	23·94	162	133
d	Alcester (Ragley Hall)	Mr. C. Harding	5	1 0	270	25·8	25·40	..	125
	Ashorne (Victoria Cottage)	G. T. Osborn, Esq.	5	1 0	160	24·7	23·33	..	..
D	Stratford-on-Avon(Snitterfield)	F. W. Jones, Esq., C.E.	5	1 6	274	25·2	23·06	176	118
D	Southam (Stockton House)	G. B. Blyth, Esq.	6	1 4	394	23·1	21·02	184	127
D	Studley College	The Head Mistress	5	0 9	235	27·0	24·29	167	123
D	Warwick Castle Gardens	Mr. H. F. Smale	5	1 0	197	25·3	26·48	183	139
	Leamington (Radford House)	C. E. G. Hatherell, Esq.	5	1 2	240	24·9	23·60	172	130
D	Leamington(PumpRoomGdns.)	Medical Officer of Health	8	1 0	165	24·0	24·60	179	123
D	Leamington (Lillington Road)	Rev. J. I. Farr	5	1 3	228	..	25·95	192	131
d	Warwick (Haseley W. W.)	R. Wormell, Esq. C.E.	8	..	360	..	25·79	..	..
D	Leek Wootton (The Lodge)	W. F. Mitchell, Esq.	5	1 0	249	..	25·45	201	128
D	Henley-in-Arden (Hillfield)	W. E. Milner, Esq.	5	1 0	450	25·9	25·86	179	130
D	Dunchurch Lodge Gardens	Major H. S. Cayzer	5	1 0	380	24·4	27·05	162	148
D	Stretton-on-Dunsmore(Manor Ho.)	Mrs. Lister-Kaye	5	1 0	280	24·9	25·63	178	145

* Formerly called (Green Hill).

DIVISION VI.—WEST MIDLAND COUNTIES—(*con.*).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge Height of Rim above Ground.	Height of Ground above Sea Level.	Average Rainfall.	1928 Rainfall.	Days with ·01 in. or more.	Days with ·04 in. or more.
WARWICKSHIRE—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
1.—SEVERN—Upper Avon—(*con.*).								
D Rugby (Bilton Grange)	Mr. J. S. Buckby	5	1 0	400	22·7	23·31	188	131
D Rugby (Caldecott)	R. M. Carey, Esq.	5	1 0	390	25·6	25·94	163	134
D Ryton-on-Dunsmore(RytonHo.)	Charles Browett, Esq.	5	1 2	260	26·0	28·27	171	145
D Coventry (Whitley P.S.)	E. H. Ford, Esq., C.E.	8	1 0	238	..	26·00	185	140
D Coventry (Stoke)	W. R. Griffiths, Esq.	5	1 0	267	..	26·11	194	142
D Coventry (City Hospital)	E. H. Snell, Esq., M.D.	8	1 0	270	26·0	26·78	183	143
D Coventry (Keresley Grange)	Miss H. Rotherham	5	0 10	413	27·0	30·47	229	155
2.—THAMES—Windrush & c. 2 sq. mi.								
3.—THAMES—Cherwell. 15 sq. mi.								
D Farnborough	Miss C. A. Prater	5	1 0	520	29·2	31·12	187	126
4.—TRENT—Right Bank Tributaries. 282 sq. mi.								
D Northfield (West Heath House)	J. B. Shewell, Esq.	5	1 0	590	29·3	29·01	190	135
D Solihull (Marsh Cottage)	Ivo L. Currall, Esq.	5	1 0	420	25·8	27·73	167	143
D Northfield (Bartley Res. No. 1)	A. A. Barnes, Esq., C.E.	5	1 0	600	..	31·65	191	145
D Selly Oak (Bournville)	Messrs. Cadbury Bros., Ltd.	5	1 0	469	29·1	30·41	198	137
d Selly Oak (Witherford Way)	Mrs. Neave	8	1 2	530	..	30·14	(198)	(145)
D Selly Oak (Frederick Rd.)*	Mr. W. Garden	5	1 0	520	29·2	30·81	186	154
D Birmingham (Sparkhill)	D. H. Owen, Esq.	5	1 0	425	29·1	30·89	188	140
D Birmingham (Edgbaston)	A. J. Kelley, Esq.	8	1 6	525	26·5	28·31	190	135
D Birmingham (Carpenter Road)	L. Ashby Bolton, Esq.	5	1 1	480	28·1	29·12	214	143
D Birmingham (Icknield Port)	H.K.S.Woodhouse,Esq.,C.E.	5	1 0	495	..	25·49	183	125
D Nuneaton (The Quarry)	Miss K. E. Smith	5	1 0	321	..	29·40	228	149
D Birmingham (Erdington)	F. W. Macaulay, Esq., C.E.	5	1 2	472	24·3	23·38	183	123
D Whitacre (BirminghamW.W.)	F. W. Macaulay, Esq., C.E.	5	1 0	269	26·0	25·76	183	133
D Minworth Greaves	Birmingham Drainage Bd.	8	1 0	259	24·3	26·56	204	138
D Nuneaton (Sewage P. Sta.)	R. C. Moon, Esq.	5	0 9	283	..	24·21	180	123
D Nuneaton(HartshillSewageWks.)	R. C. Moon, Esq.	5	1 2	288	..	25·03	183	132
D Sutton Coldfield (The Park)	Mr. H. Harlond	5	1 0	370	..	27·85	175	138

DIVISION VII.—NORTH MIDLAND COUNTIES.

LEICESTERSHIRE. (Area, 824 sq. mi.)								
1.—SEVERN—Upper Avon. 41 sq. mi.								
D Welford (The Reservoir)	T. W. Millner, Esq.	5	1 6	430	..	27·78	210	141
d Lutterworth (Waterworks)	A. J. Ross, Esq.	8	1 9	414	..	25·83	..	..
2.—WELLAND. 96 sq. mi.								
D Market Harborough (Rose Hill)	G. O. Nicholson, Esq.	5	1 0	350	..	27·09	160	125
D Kibworth Beauchamp	Dr. E. V. Phillips	5	1 0	390	25·7	28·37	181	139
d Knossington Rectory	Rev. G. G. Wilkinson	5	1 0	580	..	29·15	(171)	(132)
Hallaton (Horninghold House)	Mr. B. Inchley	5	1 6	380	..	25·42	..	..
3.—WITHAM. 7 sq. mi.								
4.—TRENT—Right Bank Tributaries. 680 sq. mi.								
D Ullesthorpe (High Cross)	J. Parker Toone, Esq.	..	..	..	..	27·74	206	150
D Peatling Magna (Peatling Ho.)	Dr. C. Royds Jones	5	1 1	354	..	23·62	183	126
D Wistow Hall Gardens	The Lord Cottesloe, C.B.	5	1 0	309	..	26·60	181	136
D Countesthorpe(WigstonSewFm.)	W. G. J. Clark, Esq.,C.E.	8	0 9	257	..	23·64	218	134
D Leicester (Stoughton Drive)	Theodore B. Ellis, Esq.	5	1 0	315	..	25·36	190	141
D Leicester (Town Hall Square)(+A)	A. T. Gooseman,Esq.,C.E.	5	0 7	212	..	23·50	179	126
D Leicester City Mental Hosp.	The Steward	8	1 0	266	..	26·41	210	134
D Leicester (Gilroes Cemetery)	A. T. Gooseman, Esq., C.E.	5	1 0	285	..	26·81	175	128
D Leicester (Groby Road)	Miss V. D. Ellis	5	1 0	244	..	28·64	..	..
D Market Bosworth (OsbastonHall)	Sir Thos. Cope, Bt.	8	1 0	393	..	25·30	151	131
D Thornton Reservoir	G. T. Edwards, Esq., C.E.	8	1 2	370	26·2	29·31	179	149
D Cropstone (Bradgate Res.)	G. T. Edwards, Esq., C.E.	8	1 0	245	..	33·64	192	150
D Barkby Hall	Victor R. Pochin, Esq.	5	1 0	227	26·3	27·00	179	139

* Gauge formerly at Lodge Hill.

DIVISION VII.—NORTH MIDLAND COUNTIES—(*con.*).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge: Height of Rim above Ground.	Rain-gauge: Height of Ground above Sea Level.	Average Rainfall.	1928: Rainfall.	1928: Days with ·01 in. or more.	1928: Days with ·04 in. or more.
LEICESTERSHIRE—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
4.—TRENT—Right Bank Tributaries—(*con.*).								
D Swithland (The Brand)	G. T. Edwards, Esq., C.E..	8	1 0	171	..	30·77	197	136
D New Packington	G. C. Wooldridge, Esq.	5	1 0	440	..	28·87	221	141
Packington	Rev. C. C. Pratt	5	1 0	360	..	30·84	..	..
D Barrow-upon-Soar (The Mount)	Mrs. C. Stuart Thomson ..	5	1 6	..	..	26·50	152	119
D Hoby (The Grange)	A. A. Ironside, Esq.	5	1 0	235	..	25·25	180	133
D Asfordby Rectory	Rev. W. R. Finch	5	0 10	212	..	25·19	163	130
D Asfordby Hill (Ironworks)	Stanton Ironworks Co., Ltd.	5	1 1	300	..	25·32	163	121
D Melton Mowbray (White Lodge)	H. K. Barker, Esq.	8	1 6	237	..	26·06	196	128
D Charnwood For. (Blackbrook R.)	A. H. Walker, Esq., C.E...	5	1 0	379	..	29·85	189	151
D Loughborough (Park Road)	W. Llewellyn Mold, Esq...	5	6 0	190	..	28·26	175	125
D Loughborough (NanPantanRes.)	A. H. Walker, Esq., C.E...	5	1 0	269	..	29·09	180	138
D Loughborough (The Widenings)	Adrian Young, Esq.	5	1 0	197	..	27·58	198	137
D Loughborough (Sewage Farm)	A. H. Walker, Esq., C.E...	8	1 0	135	..	26·67	152	126
D Burton-on-the-Wolds (BurtnH.)	Earl of Huntingdon	5	1 0	270	..	27·71	166	151
D Prestwold Hall	Mr. W. Coe	8	1 0	209	..	30·16	177	132
D Belvoir Castle Gardens	The Duke of Rutland, K.G.	8	1 0	259	25·1	23·46	143	121
RUTLAND. (Area, 152 sq. mi.)								
1.—WELLAND. 125 sq. mi.								
D Uppingham (Ridlington)	N. W. Wortley, Esq.	5	4 7	527	..	28·54	190	136
d Hambleton Manor	Major J. Orr-Ewing, M.C..	5	1 0	400	..	27·81	..	122
2.—WITHAM. 5 sq. mi.								
3.—TRENT—Right Bank Tributaries. 22 sq. mi.								
LINCOLNSHIRE. (Area, 2646 sq. mi.)								
1.—NENE. 100 sq. mi.								
D Tydd (North Level Sluice)	Mr. S. Fovargue	5	1 0	10	..	28·44	168	119
2.—WELLAND. 341 sq. mi.								
D Market Deeping (Wilsthorpe)	W. H. A. Court, Esq., C.E.	8	3 10	51	..	21·68	178	121
D Holywell Hall	Lt.-Col. A. A. H. Reynardson	8	0 9	137	..	23·82	180	133
D Spalding (Pode Hole)	H. Bain, Esq.	8	1 3	12	23·5	25·29	217	133
D Spalding (Spalding Marsh)	Messrs. Seymour Cobley, Ltd.	5	1 0	0	..	22·71	157	112
3.—WITHAM & C. 1085 sq. mi.								
d Stainby Rectory	Rev. W. L. de B. Thorold..	4	0 9	496	25·5	27·60	..	121
Stroxton Rectory	Rev. S. C. Wood	5	0 10	350	..	24·93	..	..
D Denton Manor	Sir C. G. E. Welby, Bt., C.B.	5	1 0	310	..	25·84	199	136
D Grantham (Saltersford)	H. Preston, Esq.	5	0 6	188	..	22·63	185	123
D Heydour Vicarage	Rev. S. S. Herington	5	0 11	263	..	26·55	205	142
D Fishtoft School	O. Davies, Esq.	5	1 0	0	..	22·51	162	123
D Boston (Black Sluice, Skirbeck)	F. S. Robins, Esq., C.E. ..	8	1 3	11	22·8	25·07	184	126
D Boston (Grand Sluice)	J. H. Johnson, Esq., C.E...	8	8 0	18	23·2	22·64	184	130
D Boston (Bargate End)	A. O. Scrivener, Esq.	8	1 4	9	..	23·16	173	124
D Sleaford (Kesteven Mental Hos.)	Dr. J. R. Macphail	5	1 0	100	..	24·00	193	125
D Cranwell Aerodrome (+A)	The Meteorological Office..	8	1 0	236	23·2	22·95	178	118
D Anwick Vicarage	Basil W. Lee, Esq.	5	1 0	37	..	21·43	171	120
d New Leake (Lade Bank Engine)	J. H. Johnson, Esq., C.E...	5	1 0	10	23·2	20·52	..	112
D Carrington Grange	T. J. Ward, Esq.	5	6 0	15	..	21·89	164	122
D Wellingore	Rev. Canon H. Powell Smith	5	1 0	246	..	22·82	196	126
D Navenby Rectory	J. Thompson, Esq.	5	1 0	218	24·9	24·32	178	133
D Carlton-le-Moorland	J. Brocklebank, Esq.	5	1 2	50	..	23·93	178	133
D East Kirkby (E. Kirkby House)	Capt. R. S. Fieldsend	5	1 0	90	..	23·76	183	132
D Revesby Reservoir	T. H. Tyson, Esq.	5	2 0	124	24·5	23·68	156	127
D Woodhall Spa (Galen House)	J. Collins, Esq.	5	1 6	72	..	21·23	202	126
D Woodhall Spa (Clim. Sta.)	J. Collins, Esq.	5	1 0	87	..	22·91	181	121

DIVISION VII.—NORTH MIDLAND COUNTIES—(*con.*).

STATIONS.	AUTHORITIES.	Rain-gauge: Diam.	Height of Rim above Ground.	Height of Ground above Sea Level.	Average Rainfall.	1928: Rainfall.	Days with ·01 in. or more.	Days with ·04 in. or more.
LINCOLNSHIRE—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
3.—WITHAM & C.—(*con.*).								
D Horncastle	J. R. Mackavoy, Esq.	5	2 0	120	..	24·07	179	120
D Lincoln (Swallowbeck)	W. R. Pennell, Esq.	8	1 0	34	..	23·11	202	129
D Lincoln (Skellingthorpe Hall)	Miss M. Bergue-Coupland.	5	1 0	40	23·1	22·54	158	116
D Lincoln (Beaumont Fee)	Medical Officer of Health.	5	1 2	42	22·8	(22·58)	(170)	(111)
D Hackthorn Hall	E. W. Cracroft, Esq.	5	4 8	102	..	24·39	173	120
Springthorpe Rectory	Rev. B. Davies	5	1 0	75	..	23·66	159	124
4.—GREAT EAU & C. 443 sq. mi.								
D Skegness (Marine Gardens)	F. A. Jenkins, Esq.	8	1 0	12	23·3	23·28	165	130
D East Keal Rectory	Rev. R. H. Simpson	5	1 0	180	..	21·64	169	122
D Spilsby	J. E. Bolt, Esq.	5	1 4	124	..	27·27	181	135
D Hagworthingham (Glebe House)	Mr. R. Wright	5	1 0	240	..	23·23	174	135
D Mablethorpe (Trusthorpe Hall)	I. N. Woodiwiss, Esq.	8	1 3	10	..	22·68	195	122
D Louth (Westgate)	Rev. W. E. Yates	5	0 9	120	28·0	25·58	198	140
D Kirmond	Mrs. C. Fieldsend	5	1 2	309	..	26·11	177	131
D Wold Newton Manor	W. Maurice Wright, Esq.	5	1 6	230	..	26·92	218	147
D Grainsby Hall	Mr. J. Butters	5	1 0	75	..	25·43	221	144
5.—HUMBER—Right Bank Tributaries. 428 sq. mi.								
D North Willingham House	Mrs. Charles Wright	5	3 0	125	..	29·78	232	157
d Brigg (Thornholme)	E. J. Brown, Esq.	5	1 5	22	..	26·62	..	125
D Brigg (Wrawby Road)	A. R. Haynes, Esq.	5	1 1	22	..	27·02	185	130
D Cleethorpes (Kings Parade)	Urban District Council.	5	1 0	23	..	21·66	184	122
D Grimsby (Abbey Road)	W. J. Wood, Esq., C.E.	5	3 6	25	..	23·52	184	130
D Grimbsy (Westlands)	Major G. L. Bennett.	5	1 0	23	..	21·78	176	123
D Brocklesby Park	Mr. J. Chisholm	5	1 0	90	..	27·83	181	133
D Ulceby (Wootton Lodge)	Mr. F. W. Prentice	5	1 5	100	..	26·93	170	126
D Scunthorpe (Normanby)	A. G. Wilkes, Esq.	5	1 0	185	..	27·26	189	139
D Horkstow	E. J. Turton, Esq.	5	1 0	75	..	28·08	173	143
D Ferriby Sluice	F. Straw, Esq.	5	1 0	18	..	25·51	187	119
6.—TRENT—Right Bank Tributaries. 172 sq. mi.								
D Swinderby (Ling Moor)	C. H. Wray, Esq.	5	1 0	50	..	27·27	174	158
d Woolsthorpe	L. and N.E. Rly.	5	1 3	182	..	21·75	..	120
D Torksey	Miss M. Burtt	5	1 0	18	..	22·23	167	120
d Gate Burton Hall	The Hon. Mrs. Sandars	5	2 0	97	..	23·19	..	..
D Messingham School	W. E. Ramsden, Esq.	5	0 6	115	..	24·18	193	125
7.—TRENT—Left Bank Tributaries. 77 sq. mi.								
D Wroot (S. Level Pump Station)	Mr. F. S. Trafford	10	2 0	8	..	22·11	159	109
d Crowle (N. Level Pump Station)	Mr. H. G. Trafford	5	2 0	10	22·6	25·58	..	124
NOTTINGHAMSHIRE. (Area, 843 sq. mi.)								
1.—WITHAM. 10 sq. mi.								
2.—TRENT—Right Bank Tributaries. 218 sq. mi.								
D Sutton Bonington Agric. Coll. (+A)	The Principal	5	1 0	158	21·7	24·49	168	127
D Plumtree (Normanton-on-Wolds)	T. A. Hill, Esq.	8	2 0	170	24·0	24·78	186	128
D Ruddington (Westlands)	J. D. Walker, Esq.	5	1 0	100	24·3	24·96	187	133
D Nottingham (Wilford Hill Res.)	F. W. Davies, Esq., C.E.	8	1 0	295	23·1	24·21	193	134
D East Bridgford	G. W. Beaumont, Esq.	5	1 0	100	..	25·49	174	131
D Newark	J. H. Clarke, Esq., C.E.	5	0 9	43	23·4	25·19	206	135
3.—TRENT—Derwent. 2 sq. mi.								

DIVISION VII.—NORTH MIDLAND COUNTIES—(*con.*).

STATIONS.	AUTHORITIES.	Rain-gauge Diam.	Rain-gauge Height of Rim above Ground.	Rain-gauge Height of Ground above Sea Level.	Average Rainfall.	1928 Rainfall.	1928 Days with ·01 in. or more.	1928 Days with ·04 in. or more.
NOTTINGHAMSHIRE—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
4.—TRENT—Erewash. 42 sq. mi.								
D Nottingham (Strelley)	Major T. L. K. Edge	8	1 0	386	26·2	28·25	212	133
D Nottingham (Strelley Hall)	Major T. L. K. Edge	5	1 0	377	25·5	27·64	189	140
D Bulwell (Watnall Reservoir)	F. W. Davies, Esq., C.E.	8	1 0	471	29·0	29·46	205	144
D Eastwood Waterworks	F. W. Davies, Esq., C.E.	8	1 2	243	25·9	29·72	193	136
d Eastwood Hall	Messrs. Barber, Walker & Co., Ltd.	5	1 0	218	..	29·77	..	..
D Eastwood (Moorgreen Res.)	L. and N. E. Rly. Co.	5	6 0	301	27·4	33·19	200	144
D Annesley (Selston W.W.)	S. Maylan, Esq.	5	1 0	475	26·2	27·92	171	131
5.—TRENT—Left Bank Tributaries. 569 sq. mi.								
D Attenborough	R. F. T. Granger, Esq.	8	1 0	885	..	26·36	182	132
D Beeston (Council Depot)	E. A. Bush, Esq.	5	1 0	121	24·5	26·86	179	141
D Nottingham (Trent Lane) (+A.)	T. Wallis Gordon, Esq., C.E.	8	1 0	83	22·5	24·47	187	131
D Nottingham (The Castle)	T. Wallis Gordon, Esq., C.E.	8	1 0	192	23·6	24·17	180	145
D Nottingham (Colwick Hill Res.)	F. W. Davies, Esq.	8	1 0	314	..	24·29	172	133
D Nottingham (Burford Road)	A. B. Tinn, Esq.	5	1 0	170	25·3	26·96	194	136
D Nottingham (Stoke Bardolph)	T. Wallis Gordon, Esq., C.E.	8	1 0	66	23·3	25·86	196	139
D Nottingham (Mapperley Hill)	Dr. G. L. Brunton	8	1 0	400	24·9	26·54	186	149
D Bagthorpe (Isolation Hospital)	P. Boobbyer, Esq., M.D.	8	1 0	190	25·3	27·24	203	136
D Nottingham (Basford W.W.)	F. W. Davies, Esq., C.E.	8	1 0	168	24·3	26·16	175	126
D Burton Joyce Waterworks	F. W. Davies, Esq., C.E.	8	1 0	65	25·2	26·48	177	142
D Bulcote (Corporation Farm)	T. Wallis Gordon, Esq., C.E.	10	1 3	65	23·6	25·90	197	132
Lowdham (Chilwell Nurseries)	J. D. Pearson, Esq.	5	1 5	90	21·4	24·71	..	..
D Bulwell (Bestwood W.W.)	F. W. Davies, Esq., C.E.	8	1 2	315	25·7	26·20	187	131
D Daybrook (Red Hill Reservoir)	F. W. Davies, Esq., C.E.	8	1 0	404	26·8	27·50	227	135
D Daybrook (Ramsdale Hill Res.)	F. W. Davies, Esq., C.E.	8	1 0	504	28·1	27·46	223	137
D Bulwell Hall Park	T. Wallis Gordon, Esq., C.E.	8	1 0	252	27·3	28·49	180	139
D Papplewick (Waterworks)	F. W. Davies, Esq., C.E.	8	1 0	316	27·0	27·96	173	141
D Southwell (The Residence)	Vn. Acdn. W. J. Conybeare	5	1 0	100	24·7	25·85	175	137
D Sutton-in-Ashfield (Rushley P.S.)	Messrs. G. & F. W. Hodson	5	1 0	462	27·1	30·95	177	153
D Sutton-in-Ashfield (Sew. Wks.)	F. J. Grierson, Esq.	5	1 0	453	28·9	31·50	189	150
D Mansfield (Rainworth W.W.)	J. Gibson, Esq., C.E.	5	1 0	360	27·5	26·98	165	130
D Mansfield (Carr Bank)	Borough Surveyor	8	0 10	357	..	29·51	175	134
D Mansfield (West Bank)	W. Pickard, Esq.	8	1 0	405	27·6	30·38	206	140
d Mansfield (Debdale Hall)	Francis N. Ellis, Esq.	5	1 6	400	28·1	29·62	..	128
D Clipstone Waterworks	J. Gibson, Esq., C.E.	5	1 0	225	25·9	27·59	186	143
D Ollerton (Boughton W.W.)	F. W. Davies, Esq., C.E.	8	1 0	140	25·7	24·60	196	131
d Ollerton (Thoresby Gardens)	Mr. A. J. Simmons	5	1 0	125	26·6	24·42	..	..
D Welbeck Abbey	Mr. Chas. Harris	8	0 10	196	..	27·19	215	144
D Clumber Gardens	A. E. Elliott, Esq.	5	1 0	164	..	28·46	212	146
D Elkesley Pumping Station	C. Horobin, Esq., C.E.	5	1 0	120	24·0	24·35	181	128
D Worksop (Osberton Gardens)	Mr. A. Nicholson	5	3 6	70	23·8	19·67?	178	135
D Retford (Morton Hall)	W. H. Mason, Esq.	9	1 0	140	23·7	23·92	163	130
D Retford (Sewage Disposal Wks.)	R. E. Wilson, Esq.	5	1 0	74	..	25·12	211	133
D Retford (Babworth Hall)	Capt. J. A. C. Whitaker	5	1 0	98	23·7	22·84	171	116
D Worksop (Wigthorpe Hill)	R. C. P. Ramsden, Esq.	5	1 0	100	24·1	24·15	181	125
D Worksop (Hodsock Priory) (+A)	Miss E. Mellish	8	1 0	56	23·6	24·39	198	121
d Langold (Council School)	H. Swinton, Esq.	5	1 6	120	..	26·24	..	..
D Scrooby	Mr. J. Mallender	5	1 0	40	23·1	24·26	195	124
D Bawtry Hall (The Gardens)	Mr. F. E. Hogbin	5	1 0	31	23·1	25·65	181	128
6.—OUSE—Don. 2 sq. mi.								
DERBYSHIRE. (Area, 1029 sq. mi.)								
1.—MERSEY, UPPER. 93 sq. mi.								
D Glossop W.W. (Swineshaw)	W. A. Mitchell, Esq.	12	3 0	733	..	48·32	223	179
2.—MERSEY—Weaver. 2 sq. mi.								
3.—TRENT—Right Bank Tributaries. 68 sq. mi.								
D Melbourne Vicarage	Rev. E. T. Harcombe	10	1 6	180	..	29·08	184	151
D Repton (The Croft)	H. C. Hayward, Esq.	5	1 6	170	..	28·70	209	148
D Stanton-by-Bridge W.W.	H. Raven, Esq., C.E.	8	1 2	144	..	25·23?	181	130

DIVISION VII.—NORTH MIDLAND COUNTIES—(*con.*).

STATIONS.	AUTHORITIES.	Rain-gauge Diam.	Height of Rim above Ground.	Height of Ground above Sea Level.	Average Rainfall.	1928 Rainfall.	Days with ·01 in. or more.	Days with ·04 in. or more.
DERBYSHIRE—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
4.—TRENT—Dove. 156 sq. mi.								
D Ashbourne Waterworks	E. Wright, Esq.	5	1 0	582	..	40·13	222	157
D Ashbourne (The Mansion)	R. E. Sadler, Esq.	5	1 0	404	..	40·89	210	162
D Ashbourne Vicarage	Rev. Canon F. L. Shaw	5	1 6	500	..	41·34	217	159
5.—TRENT—Left Bank Tributaries. 84 sq. mi.								
D Etwall (Blakeley Lodge)	G. Edge Laban, Esq.	5	1 0	190	..	29·37	169	149
D Etwall (Sewage Farm)	Mr. B. Hydes	5	1 8	201	..	29·40	167	150
D Mickleover (C. Mental Hospital)	G. V. Bartlett, Esq., M.D.	5	1 0	300	..	29·86	186	147
Littleover (The Knoll)	W. Blews Robotham, Esq.	5	1 0	300	..	29·98	210	149
D Littleover (Hilltop)	E. McInnes, Esq.	5	1 0	346	..	30·60	210	154
6.—TRENT—Derwent. 428 sq. mi.								
D Spondon (Derby Sewage Wks.)	C. A. Clews, Esq., C.E.	5	1 3	135	..	28·80	212	138
D Spondon Hall	Sir H. Fowler, K.B.E., LL.D.	5	4 6	230	..	32·46	210	154
d Derby (Wild Street)	Messrs. J. Davis & Son, Ltd.	5	1 0	174	..	29·05	213	150
D Derby (L.M. & S. Railway)	J. Sayers, Esq.	5	1 0	156	25·1	28·59	188	144
D Derby (Royal Infirmary)	W. Banks, Esq.	5	1 0	190	..	31·61	187	161
D Derby (The Arboretum)	C. A. Clews, Esq., C.E.	8	1 0	196	..	30·30	192	150
Kirk Langley (Langley Hall)	G. W. Peach, Esq.	5	1 5	396	28·9	33·84	203	154
D Duffield (The Kirkstyles)	Messrs. J. Davis & Son, Ltd.	5	2 0	235	27·5	35·75	210	157
D Belper (Herbert Strutt School)	The Principal	5	0 8	222	30·0	33·54	189	148
D Belper (Quarry Bank)	J. Hunter, Esq., C.E.	5	0 10	280	29·7	35·14	198	153
D Ambergate Reservoir	No. 61 S. B. Winser, Esq., C.E.	5	1 0	700	..	36·23	181	156
D Whatstandwell (Meerbrk. Sough)	Messrs. G. & F. W. Hodson	5	1 0	246	..	40·38	201	157
D Brackenfield (Lindway Res.)	R. F. Ward, Esq., C.E.	5	1 0	595	..	37·19	194	150
D Matlock Bath (Lower Tower)	Miss E. Chadwick	5	1 1	500	35·9	39·40	195	147
D Matlock (Rockside Hydro.)	J. H. Goodwin, Esq.	5	1 0	637	..	38·43	207	142
Matlock (Cross Green)	J. T. Trickett, Esq.	5	1 0	..	..	(43·16)	..	..
D Darley Dale (Whitworth Inst.)	E. Evans, Esq.	5	1 8	361	..	38·10	202	148
D DarleyDale (Stancliffe Hall) (R)	Maj. T. Bedford Franklin	8	1 0	560	..	40·91	203	152
d Clay Cross (Press Reservoirs)	Gilbert Frith, Esq., C.E.	8	1 0	810	..	(39·06)	..	..
w Buxton (Hurdlow Top)	L. M. & S. Rly.	8	1 10	1267	..	55·55	..	..
D Chatsworth Gardens	Mr. J. G. Weston	5	1 0	436	34·7	33·54	223	168
D Baslow (Over End)	A. E. Payne, Esq.	5	1 0	500	..	36·74	219	160
D Buxton (Portobello Bar)	F. Langley, Esq., C.E.	8	1 0	1600	59·7	66·97	245	202
D Buxton (Stanley Moor)	F. Langley, Esq., C.E.	8	1 0	1340	56·1	65·08	244	197
D Buxton (Burbage Edge)	F. Langley, Esq., C.E.	8	1 0	1400	56·8	62·77	245	195
D Buxton (Devonshire Hospital)	Miss E. W. Pilkington	8	1 0	1007	48·4	51·70	220	175
D Buxton (Lightwood)	F. Langley, Esq., C.E.	8	0 11	1191	..	52·29	217	186
D Bamford (Engineer's Office)	60 S. B. Winser, Esq., C.E.	8	2 1	510	38·6	44·83	248	175
D Bamford Filters	No. 70A S. B. Winser, Esq., C.E.	8	1 0	656	38·5	45·71	233	181
w Froggatt Edge (Stoke Flat)	J. G. Bown, Esq.	5	1 0	960	..	40·53	..	..
D Hope (Killhill Bridge)	No. 56 D. W. Chadwick, Esq.	5	1 0	500	..	46·76	218	173
d Bamford (Yorkshire Br. Weir)	59 S. B. Winser, Esq., C.E.	5	1 0	540	..	44·88	..	..
D Derwent Vicarage	No. 67 S. B. Winser, Esq., C.E.	8	1 0	675	44·6	50·88	240	183
Derwent (Lockerbrook Plant.)	68 S. B. Winser, Esq., C.E.	5	1 0	782	48·5	56·33	..	..
D Derwent Dam	No. 26 S. B. Winser, Esq., C.E.	8	1 0	790	42·4	52·71	249	191
M Woodland Dale (Woodlands, N)	47 S. B. Winser, Esq., C.E.	5	1 0	1063	..	50·15	..	..
M Hayfield (Ashop Head)	No. 43 S. B. Winser, Esq., C.E.	5	1 0	1650	46·2	54·70	..	..
Derwent Dale (Shire Owlers)	69 S. B. Winser, Esq., C.E.	5	1 0	825	42·7	50·07	..	..
Derwent Dale (Birchinlee)	No. 23 S. B. Winser, Esq., C.E.	8	1 0	870	49·9	62·03	260	192
Westend Bridge	No. 66 S. B. Winser, Esq., C.E.	5	1 0	878	50·0	63·58	..	..
M Lady Clough Moor	No. 41 S. B. Winser, Esq., C.E.	5	1 0	1720	46·8	55·30	..	..
M Lady Clough Moor	No. 41A S. B. Winser, Esq., C.E.	5	1 0	1720	..	60·50	..	..
Coldharbour Moor (Summit)	39 S. B. Winser, Esq., C.E.	5	1 0	1670	47·5	53·70	..	..
D Derwent Dale (Howden Dam)	17 S. B. Winser, Esq., C.E.	8	1 0	829	47·9	58·05	263	192
Derwent Dale (Ridge Farm)	13A S. B. Winser, Esq., C.E.	8	1 0	875	42·0	61·43	..	..
M Alport Moor (Glethering Cl.)	40 S. B. Winser, Esq., C.E.	5	1 0	1640	46·7	57·41	..	..
M Alport Moor (Glethering Cl.)	40A. S. B. Winser, Esq., C.E.	5	1 0	1640	..	56·07	..	..
M Westend Moor (Blacklow Cote)	15 S. B. Winser, Esq., C.E.	5	1 0	970	51·5	61·05	..	..
M Westend Moor	No. 10 S. B. Winser, Esq., C.E.	5	1 0	1560	47·1	58·87	..	..

DIVISION VII.—NORTH MIDLAND COUNTIES—(*con.*).

STATIONS.	AUTHORITIES.	Rain-gauge Diam.	Height of Rim above Ground.	Height of Ground above Sea Level.	Average Rainfall.	1928 Rainfall.	Days with ·01 in. or more.	Days with ·04 in. or more.
DERBYSHIRE—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
6.—TRENT—(*con.*)								
M Alport Moor	No. 38 S. B. Winser, Esq., C.E.	5	1 0	1790	47·0	54·80	..	..
M Alport Moor	No. 38A. S. B. Winser, Esq., C.E.	5	1 0	1790	..	58·20	..	..
Derwent Dale (Slippery Stones)	62 S. B. Winser, Esq., C.E.	5	1 0	908	49·3	60·23	..	..
M Ridgewalk Moor	No. 9 S. B. Winser, Esq., C.E.	5	1 0	1650	47·5	59·15	..	..
M Broadhead Clough	No. 63 S. B. Winser, Esq., C.E.	5	1 0	1005	53·3	62·18	..	..
7.—TRENT—Erewash. 50 sq. mi.								
D Long Eaton (The Hall)	H. Raven, Esq., C.E.	8	0 10	105	..	24·87	185	134
d Ilkeston (New Stanton)*	Stanton Ironworks Co. Ld.	5	1 0	150	..	(29·59)	(173)	(136)
D Heanor (Sharplow)	J. R. Groom, Esq.	5	1 0	240	..	32·16	208	150
D Codnor (Cross Hill)	A. F. Pine, Esq.	5	1 0	394	27·5	34·58	194	150
D Codnor Park	L. M. & S. Rly. Co.	5	1 0	243	29·3	37·28	234	155
8.—OUSE—Don. 148 sq. mi.								
D Chesterfield (Walton San.)	Dr. A. Niven Robertson	5	1 0	450	..	33·79	192	139
D Chesterfield (Linacre Res.)	Chesterfield Water Board	8	1 0	430	33·4	34·90	202	155
D Chesterfield (Linacre Res.)	Chesterfield Water Board	5	1 0	475	31·6	34·40	202	155
D Chesterfield (Sewage Works)	S. Thornhill, Esq.	5	2 0	223	..	26·45	176	122
D Totley Hall	W. A. Milner, Esq.	5	1 0	700	37·3	43·56	220	164

DIVISION VIII.—NORTH-WESTERN COUNTIES.

CHESHIRE. (Area, 1,027 sq. mi.)

1.—MERSEY, UPPER. 200 sq. mi.								
D Langley (Bottoms Res.)	E. Hamson, Esq., C.E.	5	1 0	664	38·5	45·12	212	173
D Macclesfield (Leadbeaters Res.)	E. Hamson, Esq., C.E.	5	1 0	608	33·1	37·20	206	162
D Macclesfield (West Park)	E. Hamson, Esq., C.E.	5	1 0	500	34·1	38·95	212	166
d Rainow (Marsh House)	R. A. Shaw, Esq.	5	4 0	820	..	43·39	..	..
D Rainow (The Clough)	Miss Anna Neave	5	1 3	815	34·4	42·71	235	170
D Knutsford (Hazelfield)	H. P. Ashworth, Esq.	5	1 0	213	30·3	35·65	208	161
D Kettleshulme (Glebe House)	A. Y. Barker, Esq.	5	1 6	850	39·6	42·14	219	185
d Poynton (Waterloo)	J. W. Muirhead, Esq.	5	1 0	390	32·6	38·79	(205)	(165)
D Whaley Bridge (Todds Brook)	Mr. F. Bowden	5	1 0	602	..	50·21	247	178
D Disley (Lyme Park)	T. Molyneux, Esq., C.E.	5	1 0	674	..	40·80	204	165
D Disley (Lyme Park)	T. Molyneux, Esq., C.E.	5	1 0	720	..	42·73	204	166
D Runcorn (Weston Point)	Weaver Navigatn. Trustees	8	1 4	17	31·3	34·52	213	160
D Moore (Uplands)	Lt.-Comm. G. K. Rylands, R.N.	5	1 0	120	..	33·71	211	151
D Thelwall (The Clough)	E. W. Reynolds, Esq.	5	1 0	95	31·4	37·04	207	166
Altrincham (Norman's Place)	Miss G. A. Griffiths	5	8 0	150	33·6	41·72	..	..
Altrincham (Burlington Cott.)†	Miss Laura Newton	8	2 6	103	31·4	39·33	..	..
D Stockport (Torkington)	S. Arrowsmith, Esq.	5	1 0	402	..	39·04	228	167
Cheadle (Adswood)	R. W. Wright, Esq.	5	1 0	186	..	35·83	..	..
D Stockport (Isolation Hospital)	N. Gibbie, Esq. M.D.	5	1 2	285	..	38·38	204	158
Godley Reservoir	L. Holme Lewis, Esq., C.E.	12	2 0	500	31·8	40·37	..	..
D Broadbottom (Harewood Lodge)	Col. W. Sidebottom	5	1 0	440	34·6	42·71	189	167
D Dukinfield (Higher Reservoir)	G. H. Raddin, Esq., C.E.	8	1 6	495	..	40·72	215	167
D Dukinfield (Lower Reservoir)	G. H. Raddin, Esq., C.E.	5	1 0	435	33·0	43·92	214	172
Arnfield Reservoir	L. Holme Lewis, Esq., C.E.	12	2 0	512	39·1	46·46	..	..
Rhodes Wood Reservoir	L. Holme Lewis, Esq., C.E.	12	2 0	545	42·9	49·93	..	..
Torside Reservoir	L. Holme Lewis, Esq., C.E.	12	2 0	669	44·0	49·30	..	..
D Stalybridge (Market Ground Yd.)	G. H. Raddin, Esq., C.E.	5	1 0	373	..	46·07	198	171
D Stalybridge (Brushes Filter Ho.)	G. H. Raddin, Esq., C.E.	5	1 6	616	39·2	48·34	207	174
Swineshaw Moor (Lees Hill)	G. H. Raddin, Esq., C.E.	5	1 0	1168	38·6	49·41	..	..
Woodhead Reservoir	L. Holme Lewis, Esq., C.E.	12	2 0	815	47·7	51·53	..	..
Crowden (Span Gutter)	L. Holme Lewis, Esq., C.E.	5	1 0	1530	..	51·14	..	..
Woodhead (Pikenaze)	L. Holme Lewis, Esq., C.E.	5	1 0	907	..	42·34	..	..

* Formerly known as "Hallam Fields."
† Formerly described as "Barrington House." The gauge has not been moved.

DIVISION VIII.—NORTH-WESTERN COUNTIES—(*con.*).

STATIONS.	AUTHORITIES.	Rain-gauge Diam.	Height of Rim above Ground.	Height of Ground above Sea Level.	Average Rainfall.	1928 Rainfall.	Days with ·01 in. or more.	Days with ·04 in. or more.
CHESHIRE—(*con.*)		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
1.—MERSEY, UPPER—(*con.*).								
Ormes Moor	L. Holme Lewis, Esq., C.E.	5	1 0	1356	..	48·30	..	..
Pikenaze Moor (Round Hill)	L. Holme Lewis, Esq., C.E.	5	1 0	1514	..	44·06	..	..
Upper Heyden	L. Holme Lewis, Esq., C.E.	5	1 0	1718	..	46·38	..	..
Grains Moss	L. Holme Lewis, Esq., C.E.	5	1 0	1570	..	49·29	..	..
2.—MERSEY—Weaver. 489 sq. mi.								
D Wirswall Hall	J. Alleyne Robinson, Esq..	5	1 0	500	..	27·48?	194	165
D Nantwich (Dorfold Hall)	Weaver Navigatn. Trustees	8	1 0	190	28·8	33·92	237	176
D Nantwich (Reaseheath Hall)	Weaver Navigatn. Trustees	8	1 0	130	29·1	32·39	254	172
D Crewe (Weston Lane)	L. M. & S. Rly.	12	4 0	186	28·2	31·49	207	157
D Crewe (Isolation Hospital)	E. C. Timbrell, Esq., C.E..	5	1 0	172	27·6	29·45	193	146
D Sandbach (Malkin's Bank)	Messrs. Brunner, Mond & Co.	5	1 0	230	..	30·70	201	150
D Congleton (Sewage Works)	W.H. Duncan Arthur, Esq., C.E.	5	1 0	248	30·1	35·61	213	159
D Tarporley (Tirley Garth Gdns.)	Mr. J. B. Allan	5	3 6	450	30·0	32·35	228	170
D Middlewich	Messrs. Brunner, Mond & Co.	5	1 0	138	..	31·51	187	157
d Middlewich (Bostock Hall)	Capt. W.H. France-Hayhurst	5	2 0	157	29·3	33·53	..	138
D Delamere (Linmere)	Office of Woods	8	0 9	250	29·5	34·63	266	160
D Northwich (Sandiway, W.W.)	*J. Birtwistle, Esq.	8	1 0	163	..	34·22	217	171
D Northwich (Hunts Lock)	Weaver Navigatn. Trustees	8	1 0	47	30·6	32·48	229	158
D Northwich (Winnington)	Messrs. Brunner, Mond & Co.	5	1 0	64	28·9	31·57	225	156
D Northwich (Barnton)	Giles Owen, Esq.	5	1 0	175	30·3	31·87	221	160
D Northwich (Lostock Gralam)	Messrs. Brunner, Mond & Co.	5	1 0	75	..	33·14	229	156
3.—MERSEY LOWER & C. 142 sq. mi.								
D Ince Hall	Mrs. Park-Yates	5	1 0	95	..	34·94	222	176
D Hooton Waterworks	A. J. Robinson, Esq.	5	1 0	97	30·3	33·49	218	163
D Crosshill Reservoir	R. F. Baker, Esq.	5	1 0	237	..	29·02	217	149
D Prenton Waterworks	A. J. Robinson, Esq.	5	1 6	91	28·1	28·23	188	147
D Rock Ferry (High School)	L. Davies-Shiel, Esq.	5	1 0	100	..	30·24	213	152
D Rock Ferry (Elmhurst)	Miss C. J. Shepherd	8	6 0	100	30·8	(34·10)	204	158
D Rock Ferry (Highfield South)	R. H. Arundell, Esq.	5	1 0	80	..	33·76	200	168
D Birkenhead (Oxton)	J. H. Howell, Esq.	5	1 1	163	..	31·20	204	154
D Birkenhead (Bidston Obs'y.) (+A)	The Director	8	1 0	189	27·9	29·11	197	142
D Hoylake (District Council Office)	R. W. Fraser, Esq.	5	1 0	29	27·6	30·74	192	164
D Wallasey (Warren Park)	Dr. T. W. N. Barlow	5	1 0	66	..	32·85	205	157
4.—DEE. 127 sq. mi.								
D Eaton Hall Gardens	Mr. N. F. Barnes	5	3 0	72	26·9	32·08	220	178
Eccleston	E. Wells, Esq.	5	1 1	94	26·8	31·34	208	164
D Rowton (Holly Bank)	J. H. Salmon, Esq.	5	1 5	123	29·4	30·92	195	143
D Chester (Sewage Disposal Wks.)	C. Greenwood, Esq., C.E..	5	1 0	33	..	29·50	188	154
D Chester (Waterworks)	C. Wilfrid Bennett, Esq ...	5	0 10	85	26·4	28·98	219	150
D Capenhurst Hall	R. T. Richardson, Esq. ...	5	1 0	130	31·7	33·78	213	170
Neston (Vine House)	H. F. Russell, Esq.	5	1 0	111	26·8	27·30	213	154
d Heswall (Gayton Cottage)	L. N. Brooke, Esq.	5	1 0	29	27·4	28·40	..	..
D West Kirby (Caldy Manor)	Mr. E. L. Barker	5	0 11	131	27·9	27·80	221	139
West Kirby (Hilbre House)	Egerton Macdona, Esq. ...	5	0 9	25	27·8	30·06	..	..
d West Kirby (Princes Avenue)	Miss G. S. Kirkby	5	1 0	80	28·9	29·02	(208)	(150)
D West Kirby (St. Andrew's Vic.)	Rev. E. F. Robson	5	1 0	25	27·9	28·26	208	146
D West Kirby (Deeside Nursery)	H. Ward, Esq.	5	1 6	45	..	28·73	199	148
SOUTH LANCASHIRE. (Area, 687 sq. mi.)								
1.—ALT & C. 103 sq. mi.								
D Litherland (Council Gardens)	G. Ponsford, Esq. C.E. ..	5	1 0	59	..	33·49	191	158
d Ormskirk (Bickerstaffe P. Stn.)	C. Burton Ede, Esq., C.E..	5	1 2	128	31·4	37·89	(183)	(151)
d Ormskirk (Springfield P. Stn.)	C. Burton Ede, Esq., C.E..	5	0 11	70	..	38·98	(186)	(146)
D Formby (The Dunes)	J. Harold Coney, Esq.	5	1 0	40	..	36·45	185	153
M Downholland (Barton Moss)	J. Baxendell, Esq.	5	1 0	14	..	37·34	..	..

* Previously known as Northwich (Cuddington).

DIVISION VIII.—NORTH-WESTERN COUNTIES—(*con.*).

STATIONS.	AUTHORITIES.	Rain-gauge: Diam.	Height of Rim above Ground.	Height of Ground above Sea Level.	Average Rainfall.	1928: Rainfall.	Days with ·01 in. or more.	Days with ·04 in. or more.
SOUTH LANCASHIRE—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
2.—MERSEY, LOWER. 240 sq. mi.								
D Garston	T. P. Frank, Esq., C.E.	10	1 10	82	..	42·43	216	179
D Garston (Grassendale Park)	Miss E. C. Abraham	5	1 0	35	30·1	35·73	223	167
D Aigburth (Holmfield)	Miss M. E. Maxwell	5	1 0	100	32·3	36·52	230	168
D Aigburth (Beech Lawn)	T. H. Edwards, Esq.	8	1 0	120	31·7	34·98	217	162
D Liverpool (Lark Lane)	T. P. Frank, Esq., C.E.	10	10 8	90	..	36·73	210	158
D Liverpool (Smithdown Road)	T. P. Frank, Esq., C.E.	10	0 9	134	32·8	37·49	209	164
D Liverpool (Monument Pl.) (+A)	T. P. Frank, Esq., C.E.	5	1 3	124	..	33·42	191	149
D Liverpool (Rathbone Road)	T. P. Frank, Esq., C.E.	10	1 0	198	35·0	40·26	213	166
D Liverpool (Newsham Park)	T P. Frank, Esq., C.E.	10	1 1	139	..	41·71	220	181
D Liverpool (Breeze Lane)	T. P. Frank, Esq., C.E.	5	0 9	134	34·9	36·85	204	165
d MossleyHill(QuarryBk.HighSch.)	R. L. Burrows, Esq.	5	1 0	176	..	34·84	(194)	(145)
D Warrington (Howley Yard)	A. M. Ker, Esq.	10	0 9	26	..	33·72	182	149
D St. Helen's (Eccleston Hill)	A. W. Bradley, Esq.	12	1 0	265	33·8	41·87	214	161
D St. Helen's (Victoria Park)	Dr. F. Hauxwell	8	1 5	160	..	41·25	225	170
d Earlestown (Newton Cemetery)	T. E. Clough, Esq.	5	1 0	75	32·5	41·16	..	..
D Leigh (Sewage Works)	D. Ledson, Esq.	5	1 0	67	..	40·11	219	170
D Leigh (Leesrigg)	Maj. T. Hunter, V.D., C.E.	5	1 0	71	..	41·42	226	179
3.—MERSEY—Irwell. 299 sq. mi.								
D Manchester (Hullard Park)	E. Worrall, Esq., C.E.	8	1 1	100	..	42·86	203	184
D Urmston(Sew.Wks.,Davyhulme)	G. F. Walter, Esq.	8	1 0	72	31·4	42·09	201	170
D Patricroft (Eccles Sewage Wks.)	C. J. Girling, Esq.	5	1 3	50	..	36·41	201	151
D Manchester (Godlee Observ'y)	W. C. Jenkins, Esq.	8	1 6	140	33·0	39·13	204	152
D Manchester (Oldham Road)	Dr. R. Veitch Clark	5	1 0	191	34·3	43·40	217	166
D Manchester (Whitworth Park)	Manchester University	8	1 5	125	31·7	38·10	213	157
D Ashton-und.-Lyne(KnottH.Res.)	G. H. Raddin, Esq., C.E.	6	1 0	605	37·1	48·97	209	180
D Swinton (Victoria Park)	The Medical Officer of Health	6	1 0	253	..	41·34	201	160
D Prestwich Sewage Works	M. A. Piercy, Esq., C.E.	8	1 0	136	..	45·77	222	168
Prestwich Reservoir	L. Holme Lewis, Esq., C.E.	12	2 0	357	34·9	42·47	..	..
D Prestwich (Heaton Park)	Manchester Corporation	8	1 0	312	..	45·92	218	166
Prestwich (Heaton Park Res.)	L. Holme Lewis, Esq., C.E.	5	1 0	355	..	49·49	..	..
D Oldham Gas Works	Ernest Parry, Esq., C.E.	5	3 8	600	37·9	46·52	233	158
D Oldham (BrushesClough) No. 3	C. J. Batley, Esq., C.E.	5	1 0	921	..	58·82	233	185
D Bolton (Queen's Park) (+A)	T. Midgley, Esq.	5	1 0	342	43·7	54·01	234	168
D Bolton (Heaton Reservoir)	J. K. Swales, Esq., C.E.	5	1 0	500	43·4	54·06	235	175
D Bolton (Bloomfield, Heaton)	Mrs. F. Taylor, J.P.	5	1 0	530	..	47·89	212	165
D Bolton (Smithills Hall)	Nigel V. Ainsworth, Esq.	8	1 2	510	46·1	57·23	233	180
D Bury (Parsons Lane)	R. B. Rigby, Esq.	8	9 6	316	..	58·44	228	183
D Bury (Bridge Hall)	Miss C. Wrigley	8	1 0	..	..	54·16	211	185
D Bradshaw (Sewage Works)	Turton U.D.C.	5	1 0	329	..	56·73	208	181
D New Hey (Sewage Works)	Mr. J. B. Ogden	5	1 0	514	41·4	53·13	214	168
D Milnrow (Butterworth Hall)	C. J. Batley, Esq., C.E.	5	1 0	512	43·6	56·03	239	185
D Milnrow (Piethorne, Kitcliffe)	C. J. Batley, Esq., C.E.	5	1 0	766	..	59·75	237	186
D Milnrow (Piethorne, Coldgreave)	C. J. Batley, Esq., C.E.	5	1 0	832	40·9	58·69	238	187
D Rochdale (Roch Mills Sew.Wks)	S. H. Morgan, Esq., C.E.	8	1 1	363	..	54·00	224	170
D Rochdale (Broadfield Pk. Obsy.)	Dr. A. G. Anderson	8	1 0	472	43·9	51·12	226	181
D Rochdale (Fieldhead Yard)	S. H. Morgan, Esq., C.E.	8	1 0	473	..	53·65	216	172
D Rochdale (AshworthMoor Res.)	J. Entwistle, Esq.	5	1 2	956	..	58·01	218	175
Bolton (Egerton House) *Old g.*	E. H. Ashworth, Esq.	5	1 0	633	49·0	63·07	..	..
Bolton (Egerton House) *New g.*	E. H. Ashworth, Esq.	5	1 0	633	..	63·54	..	..
D Bury (Gin Hall) No. 1	J. WoodheadSmith,Esq.CE	8	1 0	475	43·7	57·28	220	171
D Bury (Gin Hall) No. 2	J. WoodheadSmith,Esq.CE	8	1 0	475	44·0	59·87	220	176
D Bolton W.W.(Springs Reservoir)	J. K. Swales, Esq., C.E.	5	1 0	800	56·6	68·67	237	182
‡ Bolton W. W. (Eagley)	J. K. Swales, Esq., C.E.	5	1 0	605	..	60·23	..	..
M Bolton W.W. (Hordern)	J. K. Swales, Esq., C.E.	5	1 0	1160	52·5	72·09	..	..
D Bolton W. W. (Delph)	J. K. Swales, Esq., C.E.	5	1 0	710	..	67·85	243	185
M Bolton W.W. (Longworth)	J. K. Swales, Esq., C.E.	5	1 0	770	51·8	67·65	..	..
D Bolton, W. W. (Wayob) .No. 2	J. K. Swales, Esq., C.E.	5	1 0	612	..	66·00	226	179
Bolton, W. W. (Holden's Farm)	J. K. Swales, Esq., C.E.	5	1 0	955	..	68·43	..	..
Bolton, W. W. (Isherwood Fold)	J. K. Swales, Esq., C.E.	5	1 0	567	..	64·76	..	..
Bolton W.W. (Top-o'-th'-Brow)	J. K. Swales, Esq., C.E.	5	1 0	935	..	73·59	..	..

‡ Gauge over-exposed on Moor.

DIVISION VIII.—NORTH-WESTERN COUNTIES—(*con.*).

	STATIONS.	AUTHORITIES.	Rain-gauge Diam.	Height of Rim above Ground.	Height of Ground above Sea Level.	Average Rainfall.	1928 Rainfall.	Days with ·01 in. or more.	Days with ·04 in. or more.
	SOUTH LANCASHIRE—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
	3.—MERSEY—Irwell—(*con.*).								
D	Bolton W.W. (Entwistle)	J. K. Swales, Esq., C.E. ..	5	1 0	700	..	68·78	249	190
	Bolton W.W. (Bromiley Heys)	J. K. Swales, Esq., C.E. ..	5	1 0	925	..	68·51	..	..
	Bolton W.W. (Fox Hill)	J. K. Swales, Esq., C.E. ..	5	1 0	885	..	69·64	..	..
‡	Bolton W.W. (Hulton Pasture)	J. K. Swales, Esq., C.E. ..	5	1 0	1130	..	60·63	..	..
‡	Bolton W.W. (Moorside)	J. K. Swales, Esq., C.E. ..	5	1 0	850	..	63·68	..	..
	Bolton W.W. (Clough)	J. K. Swales, Esq., C.E. ..	5	1 0	1150	..	73·50	..	..
	Bolton W.W. (Cote Farm)	J. K. Swales, Esq., C.E. ..	5	1 0	860	..	72·08	..	..
	Bolton W.W. (Green Lowe)	J. K. Swales, Esq., C.E. ..	5	1 0	1125	..	67·39	..	..
‡	Bolton W.W. (Little Edge)	J. K. Swales, Esq., C.E. ..	5	1 0	1100	..	61·71	..	..
	Bolton W.W. (Cranberry Moss)	J. K. Swales, Esq., C.E. ..	5	1 0	975	..	66·91	..	..
M	Bolton W.W. (Slater Lane)	J. K. Swales, Esq., C.E. ..	5	1 0	985	51·3	66·80	..	..
	Bolton W.W. (Brown Lowe)	J. K. Swales, Esq., C.E. ..	5	1 0	1200	..	70·24	..	..
	Bolton W.W. (Top of Meadow)	J. K. Swales, Esq., C.E. ..	5	1 0	1010	..	70·09	..	..
	Bolton W.W. (Naze End)	J. K. Swales, Esq., C.E. ..	5	1 0	965	..	66·32	..	..
‡	Bolton W.W. (Higher Aushaw)	J. K. Swales, Esq., C.E. ..	5	1 0	1000	..	63·40	..	..
	Bolton W.W. (Longshoot)	J. K. Swales, Esq., C.E. ..	5	1 0	930	..	67·17	..	..
‡	Bolton W.W. (Uglow)	J. K. Swales, Esq., C.E. ..	5	1 0	1150	..	62·37	..	..
D	Rochdale (Hamer Pasture Res.)	Rochdale Corporation W.W.	5	1 0	760	..	66·41	236	190
D	Rochdale (Naden Filters)	J. Entwistle, Esq.	5	1 8	761	..	62·80	213	180
M	Norden (Higher Red Lumb)	J. Entwistle, Esq.	5	1 3	1125	43·0	59·45	..	..
w	Norden (Far Knowl Farm)	J. Entwistle, Esq.	5	0 10	..	45·7	66·19	..	..
w	Rochdale (Naden Dean) *old g.*	J. Entwistle, Esq.	5	1 4	948	..	53·13	..	..
w	Rochdale (Naden Dean) *new g.*	J. Entwistle, Esq.	5	1 4	948	..	57·16	..	..
D	Littleborough (Hollngwrth Lke)	C. J. Batley, Esq., C.E. ..	8	1 0	610	..	50·92	227	169
d	Littleborough (Broadhead)	C. J. Batley, Esq., C.E. ..	8	1 0	1337	..	52·32	..	..
d	Littleborough (Blckstne Edge)	C. J. Batley, Esq., C.E. ..	8	1 0	1268	..	58·48	..	..
D	Littleborough (Uppr Chlburn)	C. J. Batley, Esq., C.E. ..	8	1 0	725	..	60·76	242	190
D	Littleborough (Chelburn)	C. J. Batley, Esq., C.E. ..	8	1 0	700	40·0	50·46	242	179
M	Ramsbottom (Killgate Brook)	J. Entwistle, Esq.	5	1 0	978	45·6	62·77	..	..
M	Ramsbottom (Cheesden Barn)	J. Entwistle, Esq.	5	1 0	997	43·8	62·22	..	..
D	Edenfield (Scout Moor Res.) No. 1.	J. Woodhead Smith, Esq. C.E	8	1 0	1275	37·4	50·33	233	174
D	Edenfield (Scout Moor Res.) No. 2.	J. Woodhead Smith, Esq. C.E	8	1 0	1275	42·0	55·57	233	181
D	Waterfoot (Cragg Reservoir)	F. W. Mozley, Esq., C.E. .	5	1 0	1323	47·2	65·20	257	178
D	Waterfoot (Cowpe Reservoir)	F. W. Mozley, Esq., C.E. ..	5	1 0	1013	47·1	64·96	257	191
D	Rochdale (Spring Mill Whitworth)	Rochdale Corporation W.W.	5	1 7	720	51·4	69·49	214	187
D	Rochdale (Cowm, Whitworth)	Rochdale Corporation W.W.	5	1 7	762	51·1	74·67	217	197
D	Helmshore (Clough House)	A. C. Cullen, Esq.	8	1 6	650	48·1	68·37	228	185
D	Haslingden (Holden Wood) No. 1	J. Woodhead Smith, Esq., CE	8	1 0	670	54·6	69·87	224	191
D	Haslingden (Holden Wood) No. 2	J. Woodhead Smith, Esq., CE	8	1 0	670	46·1	65·15	224	190
D	Haslingden (Calf Hey) ...No. 1	J. Woodhead Smith, Esq., CE	8	1 0	800	51·9	70·96	224	192
D	Haslingden (Calf Hey) ..No. 2	J. Woodhead Smith, Esq., CE	8	1 0	800	50·5	61·52	224	191
D	Bacup (Sheephouse Reservoir)	F. W. Mozley, Esq., C.E. ..	5	1 0	1008	34·0	48·51	260	174
d	Rawtenstall Cemetery	J. Johnson, Esq.	8	1 1	572	49·8	59·42	..	178
D	Rawtenstall (Cloughbottom) No. 1	J. Woodhead Smith, Esq., CE	8	1 0	1025	46·3	65·20	230	197
D	Rawtenstall (Cloughbottom) No. 2	J. Woodhead Smith, Esq., CE	8	1 0	1025	42·9	61·98	230	182
D	Rawtenstall (Hapton Res.) No. 1	J. Woodhead Smith, Esq., CE	8	1 0	930	46·9	64·19	239	211
D	Rawtenstall (Hapton Res.) No. 2	J. Woodhead Smith, Esq., CE	8	1 0	930	49·6	67·59	239	211
	4.—MERSEY, UPPER. 45 sq. mi.								
D	Didsbury (Linden Road)	L. G. King, Esq.	8	1 6	110	32·0	38·51	214	169
D	West Didsbury (Town Hall) (R)	Manchester Corporation ..	8	7 6	121	..	36·29	200	159
D	Stockport (Heaton Mersey)	Miss Leigh	5	1 0	220	30·3	34·72	206	159
D	Chorlton-cum-Hardy Sew. Works	G. F. Walter, Esq.	8	4 6	95	31·0	36·16	209	160
D	Fallowfield (Wilbraham Rd.)	H. G. Ellinger, Esq.	5	1 3	108	..	39·01	215	163
D	Fallowfield (Platt Field Park)	Manchester Corporation ..	8	1 0	124	..	39·07	213	170
	Denton Reservoir	L. Holme Lewis, Esq., C.E.	12	2 0	324	30·5	38·16	..	..
	Gorton Reservoir	L. Holme Lewis, Esq., C.E.	12	2 0	263	32·0	39·95	..	..
D	Ashton-u-Lyne (Henrietta St Yd)	G. H. Raddin, Esq., C.E...	7	1 0	394	..	47·94	224	182
D	Lower Swineshaw Reservoir	G. H. Raddin, Esq., C.E...	8	1 6	886	44·7	51·87	202	183
	Swineshaw Moor	G. H. Raddin, Esq., C.E...	5	1 0	1340	..	55·92	..	..
D	Mossley (Manor House Yard)	G. H Raddin, Esq., C.E...	5	1 0	636	..	52·54	220	175

‡ Gauge over-exposed on Moor.

DIVISION VIII.—NORTH-WESTERN COUNTIES—(*con.*).

STATIONS.	AUTHORITIES.	Rain-gauge Diam.	Height of Rim above Ground.	Height of Ground above Sea Level.	Average Rainfall.	1928 Rainfall.	Days with ·01 in. or more.	Days with ·04 in. or more.
CENTRAL LANCASHIRE. (Area, 536 sq. mi.)		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
1.—RIBBLE & C. 326 sq. mi.								
D Darwen (Sunnyhurst Hey Res.)	E. Marsden, Esq., C.E. ...	8	1 0	915	43·5	64·37	236	192
D Darwen (Earnsdale Reservoir)	E. Marsden, Esq., C.E. ...	8	1 0	705	47·0	66·69	236	192
D Darwen (Bold Venture Park)	Dr. J. Robertson	8	1 1	724	50.4	65·62	235	188
D Darwen (Hoddlesden) ..No. 1	H. M. Webb, Esq., C.E. ..	8	1 6	680	48·6	65·95	226	201
D Darwen (Daisy Green) ..No. 1	H. M. Webb, Esq., C.E. ..	8	1 6	969	46·4	57·89	227	195
D Darwen (Pickup Bank) .No. 1	H. M. Webb, Esq., C.E. ..	8	1 6	720	46·8	57·05	227	188
D Brindle (Whiteholme)	Mrs. Victor H. Gatty	5	1 8	315	34·4	49·90	194	174
D Haslingden(MitchellsHo.Res.)	A. J. Harrison, Esq.	5	1 6	990	44·7	60·28	233	195
D Blackburn (Guide Reservoir)	H. M. Webb, Esq., C.E. ..	8	1 6	610	39·6	50·91	232	184
D Blackburn (Witton)	H. M. Webb, Esq., C.E. ..	8	1 6	315	..	51·74	216	177
D Blackburn Fever Hospital	H. M. Webb, Esq., C.E. ..	6	1 6	570	..	48·56	242	188
D Blackburn (Pumping Station)	H. M. Webb, Esq., C.E. ..	8	1 6	600	..	60·93	233	194
D Hutton(Lancs.C.C.Hortic.Stat.)	J. Gillett, Esq.	5	1 0	82	35·4	44·61	204	161
D St.Anne's-on-Sea(LawrenceHo.)	C. G. D. Hoare, Esq.	5	1 6	25	33·1	41·49	199	167
D St. Anne's-on-Sea (South Side)	Dr. J. P. Litt.....	5	1 0	25	32·8	39·64	200	151
D Accrington (Milnshaw Park) ..	Mr. J. W. Terry	5	1 6	464	39·4	52·60	192	171
D Preston (Corporation Offices)	E. C. Oakes, Esq. C.E.....	8	18 7	148	35·3	47·56	245	166
D Samlesbury Sewage Works	H. M. Webb, Esq., C.E. ..	8	1 6	240	40·4	46·96	214	172
w Causeway Side (Burnley W.W.)	S. Rawlinson, Esq.....	8	2 0	1116	..	52·83	..	..
w Sheddin (Burnley W. W.)	S. Rawlinson, Esq.....	8	2 0	960	43·3	56·80	..	..
D CantCloughS.Side(BurnleyWW)	S. Rawlinson, Esq.....	8	2 0	900	43·8	57·51	247	182
D CantCloughN.Side(BurnleyWW)	S. Rawlinson, Esq.	8	2 0	900	41·6	55·26	247	180
w RamsCloughHead(BurnleyWW)	S. Rawlinson, Esq.....	8	2 0	1260	42·3	51·88	..	..
D Huncoat (Burnley Road Res.)	A. J. Harrison, Esq	9	1 6	620	..	62·28	216	172
D Wilpshire (Brooklyn Road) ...	H. W. Apperley, Esq.	5	1 0	408	..	55·19	230	181
D Great Harwood (Parsonage Res.)	H. M. Webb, Esq., C.E. ..	8	1 0	631	..	61·91	220	188
D Great Harwood (Dean Clough)	A. J. Harrison, Esq.	12	1 6	540	..	58·07	224	184
D Burnley (Queen's Park)	Dr. T. Holt	8	1 0	458	..	51·38	238	176
D Burnley (Swinden) *Upper g.*	S. Rawlinson, Esq.....	8	12 0	820	..	57·72	255	189
D Burnley (Swinden) *Lower g.*	S. Rawlinson, Esq.....	8	2 0	745	44·3	58·79	256	202
w Burnley (Extwistle Moor Top)	S. Rawlinson, Esq	8	2 0	1310	46·3	51·39	..	..
D Padiham (Altham Sew. Works)	J. Wrest, Esq., C.E.....	5	1 0	225	..	53·73	225	177
D Padiham (Gawthorpe Hall) ...	Lord Shuttleworth	8	0 9	316	43·2	52·92	216	188
D Padiham (Huntroyde)	E. G. Howsin, Esq.	5	1 0	423	..	54·14	224	179
Alston Reservoir	E. C. Oakes, Esq. C.E.....	8	1 2	320	41·0	(51·57)	..	..
D Nelson (Lomeshaye Rd.)	F. Hartley, Esq.	5	0 10	460	..	52·18	223	173
D Nelson (Coldwell Res.) S No. 2	J. A. Rodwell, Esq., C.E...	5	1 0	960	..	63·21	248	196
D Nelson (Victoria Park)	J. A. Rodwell, Esq., C.E...	5	1 0	375	..	52·92	227	183
D Nelson (Walton Lane) (+A)	J. W. Ingham, Esq.	5	1 0	540	..	54·09	232	174
D Stonyhurst College..... (+A)	Rev. E. D. O'Connor.....	8	1 10	377	46·5	60·34	213	179
M Knowle Green (Preston W. W.)	E. C. Oakes, Esq., C.E. ..	8	1 2	400	40·9	54·85	..	..
M Spade Mill (Preston W. W.) ...	E. C. Oakes, Esq., C.E. ..	8	1 2	400	41·6	53·53	..	..
M Jeffrey Hill (Preston W. W.)	E. C. Oakes, Esq., C.E. ..	8	1 2	900	47·2	62·19	..	..
D Sabden (Whins House).....	Miss Foster.....	5	1 0	500	..	54·25	215	185
D Sabden (Churn Clough Res.) ..	J. Wrest, Esq., C.E.....	5	1 0	790	..	58·90	245	186
w Sabden (Craggs Dole)	J. Wrest, Esq., C.E.....	8	1 0	1050	..	61·30	..	..
w Newchurch (Cock Dole)	J. Wrest, Esq., C.E.....	5	1 0	1090	..	62·01	..	..
D Barley (Ogden Reservoir)	J. A. Rodwell, Esq., C.E...	5	2 0	950	..	64·65	231	183
D Colne (Swinden Sew. Works)	T. H. Hartley, Esq.	5	1 0	423	..	55·34	240	188
Barrowford Reservoir	Leeds&Liverpool Canal Co.	8	1 0	473	..	50·21	..	..
Foulridge (Upper Reservoir) ..	Leeds &Liverpool Canal Co.	8	1 0	582	..	52·89	..	..
Foulridge (Reedy Moor)	Leeds &Liverpool Canal Co.	5	1 0	553	..	51·16	..	..
D Clitheroe (Hall Foot)	L. King-Wilkinson, Esq...	5	1 5	378	..	55·36	226	170
Clitheroe (Downham Hall)	R. C. Assheton, Esq.	10	1 6	464	41·5	54·81	..	..
D Chatburn (Fir Tree House)	C. W. Wheeler, Esq.	5	1 0	385	..	55·21	229	172
2.—RIBBLE—Douglas. 156 sq. mi.								
D WiganWW(BillingeHigherEnd)	W. F. Gardner, Esq., C.E..	12	3 6	374	33·9	44·90	204	161
D Orrell (Upholland Gram Sch.)	C. H. Cox, Esq.	5	1 0	320	35·5	44·05	238	171

DIVISION VIII.—NORTH-WESTERN COUNTIES—(*con.*).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge Height of Rim above Ground.	Rain-gauge Height of Ground above Sea Level.	Average Rainfall.	1928 Rainfall.	1928 Days with ·01 in. or more.	1928 Days with ·04 in. or more.
CENTRAL LANCASHIRE—(*con.*)		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
2.—RIBBLE—Douglas—(*con.*).								
Wigan W. W. (Worthington)	W. F. Gardner, Esq., C.E.	5	1 0	225	35·4	(47·56)	..	..
D Horwich (Lower Rivington)	Col. J. R. Davidson, C.E.	8	1 0	440	38·7	50·39	232	173
W Horwich (Lower Knoll)	Col. J. R. Davidson, C.E.	8	1 4	742	41·2	49·46	..	..
W‡Rivington (Brown Hill)	Col. J. R. Davidson, C.E.	8	1 4	843	40·1	51·91	..	..
D Rivington (Stoneshouse) No. 1	Col. J. R. Davidson, C.E.	8	1 4	623	41·5	49·12	216	161
Rivington (Stoneshouse) No. 2	Col. J. R. Davidson, C.E.	8	1 4	623	41·1	49·33	..	..
D Chorley (Oakdene)	Dr. H. E. Middlebrook	5	1 0	283	..	44·56	217	175
W‡Rivington (Hurst Hill)	Col. J. R. Davidson, C.E.	8	1 10	1029	43·1	61·21	..	..
W‡Rivington (Great Hill)	Col. J. R. Davidson, C.E.	8	1 8	1240	47·6	58·27	..	..
W‡Rivington (Coppice Stile)	Col. J. R. Davidson, C.E.	8	1 8	879	40·1	50·65	..	..
W Rivington (Gamekeeper's)	Col. J. R. Davidson, C.E.	8	0 8	850	45·4	58·22	..	..
D Chorley (Com. Bk. Sew. Wks.)	J. Slater, Esq.	5	1 0	179	..	41·52	217	164
D Leyland (Worden Hall)	(+A) H. Nowell ffarington, Esq.	5	1 0	125	35·4	42·84	214	165
W‡Darwen (Higher Hill)*	Col. J. R. Davidson, C.E.	8	1 4	733	36·8	49·49	..	..
D Bamber Bridge (Cuerden Hall)	J. Alleyne Robinson, Esq.	5	1 0	230	35·7	43·78	205	160
3.—COAST STREAMS. 52 sq. mi.								
W Birkdale (Kent Rd.)	J. Baxendell, Esq.	5	1 0	26	32·6	41·72	..	..
D Southport (Hesketh Park)	(+A) J. Baxendell, Esq.	8	1 0	37	32·0	41·53	209	160
4.—OUSE—Aire. 2 sq. mi.								
D Watersheddles Reservoir	M. Ratcliffe Barnett, Esq., C.E.	5	1 0	1115	..	61·84	230	194
Foulridge (Canal Office)	Leeds & Liverpool Canal Co.	8	1 0	497	..	51·97	..	..
NORTH LANCASHIRE. (Area, 609 sq. mi.)								
1. DUDDON & C. 77 sq. mi.								
D Barrow-in-Furness (Gas Works)	Claude Diamond, Esq.	11	3 0	17	37·6	62·13	222	181
D Barrow-in-Furness (Sewage Wks)	W. C. Persey, Esq., C.E.	5	1 0	20	..	54·61	234	182
D Little Urswick (North View)	J. Dobson, Esq.	5	1 6	130	45·4	64·75	234	180
D Askam (Senr. Council School)	F. Walker, Esq.	5	1 0	37	..	58·92	217	177
D Ulpha	Claude Diamond, Esq.	11	1 6	251	..	85·19	251	191
d Duddon Valley (Seathwaite Vic)	Miss Kay	5	1 0	348	..	114·78	..	..
W Duddon Val. (Seathwaite Tarn)	Claude Diamond, Esq.	11	1 6	1221	..	143·10	..	..
2.—LEVEN & C. 135 sq. mi.								
D Cartmel (Holker Hall)	Lord Richard Cavendish	5	0 9	85	44·5	67·33	224	185
D Ulverston (Pengwerne)	C. J. Chapman, Esq.	5	1 4	138	..	71·82	237	194
D Ulverston (Poaka Beck)	Claude Diamond, Esq.	11	1 6	512	52·1	69·47	230	193
Rusland Hall	C. F. Archibald, Esq.	5	1 0	25	44·7	84·99	242	194
W Cartmell Fell (Ghyll Head Res.)	J. Lupton, Esq.	8	1 3	600	..	96·38	..	..
d Coniston (School Garden)	L. Grace, Esq.	5	1 0	180	..	107·01	..	212
D Hawkshead (Tower Bank Sawrey)	Miss Alcock-Beck	5	1 0	342	65·1	100·15	233	200
Hawkshead (Foundation Sch.)	J. Lowe Handley, Esq.	5	1 0	214	..	115·74	..	..
D Hawkshead (Bettyfold)	H. T. Gnosspelius, Esq.	5	1 0	500	..	112·70	208	177
M‡Hawkshead (Black Fell)	Miss C. Marshall	5	1 6	1055	..	123·15	..	..
Ambleside (Skelwith Fold)	Miss C. Marshall	5	1 0	333	..	127·43	240	..
3.—KENT & C. 45 sq. mi.								
d Heysham Harbour	L. M. & S. Rly. Co.	5	1 6	25	..	50·25	..	..
D Morecambe	H. Morgans, Esq.	8	1 0	25	..	55·11	231	180
D Yealand Conyers (Beechfield)	Mrs. Roper	5	1 0	250	..	58·35	222	167
D Yealand Conyers (Morecambe Lo.)	J. Rawlinson Ford, Esq.	5	1 0	278	..	62·90	198	176
D Grange-over-Sands (Nutwood)	Miss S. M. Arkwright	5	1 0	140	..	63·84	208	173
D Grange-over-Sands (Holmcroft)	R. Rhodes, Esq.	5	1 3	45	..	65·20	216	182
D Lindale (Ellerhow)	Lady Tomlinson	5	1 5	300	..	77·35	214	179
D Cartmel Fell (The Schoolhouse)	R. J. Cragghill, Esq.	5	1 0	220	54·9	88·32	240	192

‡ Gauge over-exposed on Moor.
* Previously known as Rivington (Higher Hill).

DIVISION VIII.—NORTH-WESTERN COUNTIES—(*con.*).

STATIONS.	AUTHORITIES.	Rain-gauge Diam.	Height of Rim above Ground.	Height of Ground above Sea Level.	Average Rainfall.	1928 Rainfall.	Days with ·01 in. or more.	Days with ·04 in. or more.
NORTH LANCASHIRE—(*con.*)		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
4.—LUNE. 135 sq. mi.								
D Hampson in Ellel	late W. G. Welch, Esq.	5	1 0	145	..	55·72	214	160
D Quernmore (Brow Top)	F. Hill, Esq., C.E.	8	1 0	552	..	63·75	207	182
Bowland Forest (High Salter)	J. T. Sanderson, Esq.	5	1 0	1014	..	73·69	..	..
Bowland Forest (Whiteray)	J. T. Sanderson, Esq.	5	1 0	1139	..	80·28	..	..
Bowland Forest (Lower Salter)	J. T. Sanderson, Esq.	5	1 0	572	..	69·69	..	..
D Lancaster (Strathspey)	A. B. S. Welch, Esq.	5	1 0	87	..	58·89	243	178
d Lancaster (The Friends School)	G. A. Watson, Esq.	5	1 0	55	..	53·07	..	148
D Lancaster (Blea Tarn Res.)	F. Hill, Esq., C.E.	8	1 0	330	..	54·09	225	165
D Lancaster (Greg Obsy.) (+A)	Neville Holden, Esq.	8	1 0	312	41·0	62·56	229	176
D Lancaster (Lune Aqueduct)	F. G. T. Adams, Esq.	8	3 0	74	..	59·85	223	178
Caton (Escowbeck) (R)	J. H. Massey, Esq.	8	3 10	150	..	62·56	..	..
D Wray (Wray House)	Baldwin Bent, Esq., C.E.	5	1 6	170	..	59·15	216	176
d Wennington (Tatham Rectory)	Rev. A. S. Roberts	5	1 3	150	..	59·83	..	158
5.—WYRE & C. 213 sq. mi.								
D Weeton Reservoir (No. 1)	Fylde Water Board	5	1 0	133	..	51·49	211	177
D Blackpool (Met. Observatory)	E.W. Rees Jones, Esq., M.D.	5	1 0	67	33·4	43·58	210	165
D Barton (Newsham House)	W. B. S. Smith, Esq.	5	1 0	100	..	53·09	207	174
D Kirkham (Elswick Lodge)	L. G. King, Esq.	5	1 0	52	37·9	46·48	208	173
D St. Michael's-on-Wyre	Vicarage. Ven. Archdeacon Hornby	5	1 0	26	36·6	48·24	204	163
d Fleetwood	Engineer and Surveyor	8	1 8	27	..	43·93	..	..
D Garstang (Barnacre Reservoir)	Fylde Water Board	5	1 0	616	46·4	64·98	224	187
D Garstang (Grizedale Reservoir)	Fylde Water Board	5	1 0	517	43·6	60·75	223	185
Garstang (Calder Intake)	Fylde Water Board	5	1 0	632	..	66·49	..	..
Garstang (Grizedale Intake)	Fylde Water Board	5	1 0	644	..	63·48	..	..
D Wyresdale (Abbeystead Res.)	F. Hill, Esq., C.E.	8	1 0	366	..	71·78	227	197
D Abbeystead Gardens	Mr. Geo. Penk	8	1 2	420	..	69·89	221	178
Quernmore (Old Gauge Basin)	F. Hill, Esq., C.E.	8	1 0	963	..	70·19	..	..
M Wyresdale (Wardstone)	F. Hill, Esq., C.E.	8	1 0	1440	..	86·35	..	..
6.—INSULAR. 4 sq. mi.								

DIVISION IX.—YORKSHIRE.

WEST RIDING. (Area, 2,791 sq. mi.)

1.—LUNE. 178 sq. mi.								
D Austwick (Leigh House)	R. Stockdale, Esq.	5	1 0	500	..	58·56	215	170
D Austwick (Beck House)	Rev. J. Turner	5	1 1	475	..	59·40	225	177
D High Bentham (Inglefield)	Geoffrey Holmes, Esq.	5	1 0	412	..	56·03	214	169
D Sedbergh (Brigg Flats)	The Misses Wilson	5	1 0	305	..	78·90	215	184
D Sedbergh (Haverabank)	A. Mountain, Esq.	5	1 0	450	..	82·31	211	183
2.—RIBBLE. 225 sq. mi.								
D Colne (Laneshaw Reservoir)	J. F. Bedford, Esq., C.E.	5	1 0	842	..	46·74	226	172
D Barnoldswick (Rainhall Road)	Asa Burniston, Esq.	5	1 2	549	..	47·18	226	171
Barnoldswick (Greenberfield L.)	Leeds & L'pool. Canal Co.	8	1 0	488	..	52·38	..	..
D Slaidburn (Thorneyholme)	Mr. G. Marr	5	1 0	380	..	77·64	222	201
Slaidburn (Hareden Valley)	E. C. Oakes, Esq., C.E.	8	1 2	540	..	95·76	..	..
M Slaidburn (Langden Brook)	E. C. Oakes, Esq., C.E.	8	1 2	556	..	100·37	..	..
D Slaidburn (Dunsop Houses)	H. M. Webb, Esq., C.E.	8	1 6	450	62·9	90·39	210	195
D Slaidburn (Footholme)	H. M. Webb, Esq., C.E.	8	1 6	565	..	88·69	205	196
M Slaidburn (Middle Knoll)	H. M. Webb, Esq., C.E.	5	1 0	1298	..	91·32	..	..
D Slaidburn (Brennand)	H. M. Webb, Esq., C.E.	8	1 6	820	..	92·54	204	194
D Slaidburn (Croasdale House)	H. M. Webb, Esq., C.E.	8	1 6	600	..	67·44	207	178
D Slaidburn (Croasdale Valley)	H. M. Webb, Esq., C.E.	8	1 6	720	..	53·97	207	169

DIVISION IX.—YORKSHIRE—(*con.*).

	STATIONS.	AUTHORITIES.	Diam.	Rain-gauge Height of Rim above Ground.	Rain-gauge Height of Ground above Sea Level.	Average Rainfall.	1928 Rainfall.	1928 Days with .01 in. or more.	1928 Days with .04 in. or more.
	WEST RIDING—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
	2.—RIBBLE—(*con.*).								
D	Slaidburn (Whitendale)	H. M. Webb, Esq., C.E. ..	8	1 6	830	..	91·21	205	196
M	Slaidburn (Cabin Hill)	H. M. Webb, Esq., C.E. ..	5	1 2	1559	..	92·60	..	..
M	Slaidburn (Baxton Fell)	H. M. Webb, Esq., C.E. ..	5	2 6	1540	..	83·20	..	..
M	Slaidburn (Saddle Hill)	H. M. Webb, Esq., C.E. ..	5	2 6	1475	..	61·69	..	..
D	Settle (Cappleside)	Mrs. Geldard	5	0 10	500	..	67·85	225	181
D	Settle (Gas Works)	J. W. Shepherd, Esq.	8	1 0	450	..	59·73	217	178
D	Settle (Giggleswick School)	A. Russell, Esq.	8	1 0	575	..	55·65	212	179
d	Horton-in-Ribblesdale	Nathaniel Hunt, Esq.	5	1 0	800	..	70·11	..	..
	3.—MERSEY—Irwell. 2 sq. mi.								
	4.—MERSEY, UPPER. 35 sq. mi.								
	Greenfield (Upperwood Moor)	G. H. Raddin, Esq., C.E...	5	1 0	1518	46·5	53·74	..	..
D	Greenfield (Chew Mount)	G. H. Raddin, Esq., C.E...	5	1 0	1578	52·2	59·66	235	194
	Greenfield (Chew Reservoir)	G. H. Raddin, Esq., C.E...	5	1 0	1648	..	62·96	..	..
D	Greenfield (Yeoman Hey)	G. H. Raddin, Esq., C.E...	5	1 0	759	50·4	56·36	213	192
	Greenfield (Ashway Moss)	G. H. Raddin, Esq., C.E...	5	1 0	1581	37·1	50·64	..	..
W	Greenfield (Birchen Clough)	G. H. Raddin, Esq., C.E...	5	1 0	1018	53·2	55·98	..	..
M	Saddleworth Station	L. M. & S. Rly.	5	4 10	630	..	51·45	..	..
D	Oldham (Strinesdale) *New*	C. J. Batley, Esq., C.E. ..	5	1 0	791	35·9	53·33	225	175
D	Standedge(CasShawBroadh'd)*New*	C. J. Batley, Esq., C.E. .	8	1 0	857	41·8	64·40	254	210
M	Standedge (Redbrook Res.)	L. M. & S. Rly.	8	2 0	1150	45·7	59·07	..	..
D	Denshaw (Ox Hey) *New*	C. J. Batley, Esq., C.E. ..	8	1 0	1031	42·7	59·76	245	193
D	Denshaw (Crawshaw Hey)	C. J. Batley, Esq., C.E. ..	8	1 0	956	..	58·70	245	197
D	Denshaw (New Year's Br.) *New*	C. J. Batley, Esq., C.E ..	8	1 0	986	..	55·00	245	201
	5.—TRENT—Derwent. 7 sq. mi.								
M	Derwent Dale (Abbey Brook) 65	S. B. Winser, Esq., C.E. .	5	1 0	825	44·9	55·68	..	..
M	Derwent Dale (Howden Cl'gh)64	S. B. Winser, Esq., C.E. ..	5	1 0	1030	43·0	58·08	..	..
	Derwent Dale (Howden Ho.) 19	S. B. Winser, Esq., C.E. ..	8	1 0	890	42·9	49·86	..	..
M	Derwent Dale (Sandy Lee) No. 7	S. B. Winser, Esq., C.E. ..	5	1 0	1340	45·7	53·13	..	..
	6.—TRENT—Left Bank Tributaries. 143 sq. mi.								
D	Lindrick Common (Woodside)	J. F. Eardley, Esq.	5	1 0	250	..	26·06	174	130
D	Woodsetts Grange (Old Vic.)	H. P. Marsh, Esq.	5	1 6	220	..	27·23	197	138
D	Bawtry (Council Mixed School)	J. Rushworth, Esq.	5	1 0	37	..	24·75	181	126
	7.—OUSE—Don. 564 sq. mi.								
D	Sheffield W.W. (RedmiresR.) (R)	S. H. Studley, Esq., C.E. .	10	5 0	1110	40·3	44·72	218	168
	Sheffield W.W. (Redmires Res.)	S. H. Studley, Esq., C.E. .	8	4 0	1110	..	44·36	..	..
D	Sheffield W.W. (Rivelin) (R)	S. H. Studley, Esq., C.E...	10	1 6	564	35·8	41·19	208	161
	Sheffield W.W (Rivelin)	S. H. Studley, Esq., C.E...	8	1 6	564	35·7	42·03	..	..
D	Sheffield W.W. (Crookes) (R)	S. H. Studley, Esq., C.E...	10	2 0	629	29·9	34·70	194	150
	Sheffield W.W. (Crookes)	S. H. Studley, Esq., C.E...	8	2 0	629	29·9	34·83	..	..
D	Sheffield (Weston Park)	E. Howarth, Esq.	8	1 0	428	30·4	34·31	212	146
	Loxley Valley (Broadcar)	S. H. Studley, Esq., C.E...	5	1 0	1004	45·4	52·76	..	..
	Loxley V. (Oaks Fm. Damflask)	S. H. Studley, Esq., C.E...	5	1 0	550	..	41·52	..	..
	Loxley V. (Loftshaw, Strines)	S. H. Studley, Esq., C.E...	5	1 0	1011	44·3	51·08	..	..
	Loxley V. (Dale Dike Res.)	S. H. Studley, Esq., C.E...	8	1 6	715	40·9	46·85	..	..
	Loxley V. (Thornseat)	S. H. Studley, Esq., C.E...	5	1 0	1326	..	50·99	..	..
	Loxley V. (Rocher Flat)	S. H. Studley, Esq., C.E ..	5	1 0	1106	38·3	43·68	..	..
	Loxley V. (Emlin Moor)	S. H. Studley, Esq., C.E...	5	1 0	998	..	55·13	..	..
D	Rotherham (Ulley Res.) .. (2)	Vincent Turner, Esq., C.E.	5	1 0	184	..	24·22	162	129
D	Rotherham (Ulley Res.) .. (1)	Vincent Turner, Esq., C.E.	5	1 0	184	..	22·76	161	125
D	Rotherham (Ulley Res.) .. (3)	Vincent Turner, Esq., C.E.	5	1 0	132	..	24·64	162	128
D	Wincobank (Sewage Works)	J. Haworth, Esq.	5	2 0	90	..	26·53	180	130
D	Rotherham (Sitwell Vale)	G. Howard, Esq.	5	1 0	300	..	26·65	187	129
D	Rotherham (Moorgate Grange)	Messrs. Guest & Chrimes, Ltd.	5	1 0	275	25·4	24·84	176	124
D	Rotherham (Kimberw'rth Sch.)	Vincent Turner, Esq., C.E.	5	1 0	258	..	26·52	189	137

DIVISION IX.—YORKSHIRE—(*con.*).

STATIONS.	AUTHORITIES.	Rain-gauge Diam.	Height of Rim above Ground.	Height of Ground above Sea Level.	Average Rainfall.	1928 Rainfall.	Days with ·01 in. or more.	Days with ·04 in. or more.
WEST RIDING—(*con.*).		*in.*	*ft.*	*in.* *ft.*	*in.*	*in.*		
7.—OUSE—Don—(*con.*).								
D Rotherham (Aldwarke.SewWk.)	James H. Kershaw, Esq. .	5	1	4 71	..	24·31	210	134
D Rotherham (Thrybergh)	F. O. Kirby, Esq., C.E. ..	8	1	0 184	24·9	25·27	191	126
D Ecclesfield (Sewage Works)	F. Thurlby, Esq.	8	1	0 179	..	31·14	199	144
D Conisborough (Firsby Res.)	F. O. Kirby, Esq., C.E. ...	8	1	4 189	..	26·64	199	132
D Wentworth Woodhouse	Mr. A. Third	5	0	10 360	..	30·08	188	143
D Mexborough	G.Fenwick Carter,Esq.C.E.	5	1	6 77	..	23·19	185	133
Wortley (Service Reservoir)	J. R. Fox, Esq., C.E.	5	1	0 700	29·5	33·89	211	159
Midhope Moor (Barnside)	J. R. Fox, Esq., C.E.	5	1	0 1000	39·2	57·31	234	182
D Little Don Val. (Underbank Rs.)	S. H. Studley, Esq., C.E...	8	1	6 604	35·0	41·90	212	161
Little Don Val. (Brockholes)	S. H. Studley, Esq., C.E...	5	1	6 934	34·1	37·49	..	..
Little Don Val. (Sheep House)	S. H. Studley, Esq., C.E...	5	1	6 974	34·3	40·33	..	..
D Little Don Val. (Bridge Lane)	S. H. Studley, Esq., C.E...	8	1	0 761	37·3	47·89	239	170
Langsett Moor (Midhope)	J. R. Fox, Esq., C.E.	5	1	0 830	40·3	45·60	233	168
D Langsett Moor (Up. Midhope)	S. H. Studley, Esq., C.E...	8	1	6 925	39·9	45·44	239	169
Langsett Moor (Mickleden)	S. H Studley, Esq., C.E...	5	1	6 1217	46·8	59·77	..	..
Langsett Moor (Catclough)	S. H. Studley, Esq., C.E...	8	1	6 1516	46·4	60·06	..	..
Langsett Moor (Fiddlers Green)	S. H. Studley, Esq.. C.E...	8	1	6 1493	48·0	53·57	..	..
Langsett Moor (Border Hill)	S. H. Studley, Esq., C.E...	5	1	6 1148	46·1	53·87	..	..
D Langsett Moor (Swinden Lodge)	S. H. Studley, Esq., C.E...	8	1	6 1037	43·3	51·63	232	175
D Langsett Moor (Flouch Road)	S. H. Studley, Esq., C.E...	8	1	0 960	39·3	48·64	239	172
D Wath-upon-Dearne (Chapel St.)	Dr. T. Crowley	8	1	3 188	24·8	25·70	192	131
D Doncaster (Pumping Station)	F. O. Kirby, Esq., C.E. ..	5	1	6 30	..	26·22	186	135
D Doncaster (Avenue Road)	M. H. Stiles, Esq.	5	1	3 62	..	27·20	186	128
D Bolton-on-Dearne (Goldthorpe)	E. Washington, Esq.	5	1	0 130	..	25·89	194	134
Dunford Bridge (Windleden)	H. Dearden, Esq. C.E. ...	8	2	2 1100	..	62·48	..	..
Dunford Bridge (Dearden)	H. Dearden, Esq. C.E. ...	8	1	6 1244	..	62·40	..	..
D Dunford Bridge Res.	H. Dearden, Esq. C.E. ...	8	2	0 1111	..	62·82	227	196
Dunford Bridge (Harden)	H. Dearden, Esq. C.E. ...	8	2	0 1300	..	61·25	..	..
Dunford Bridge (Snailsden)	H. Dearden Esq. C.E.	8	2	0 1477	..	62·03	..	..
Penistone (Scout Dike Res.)	J. R. Fox, Esq., C.E.	5	1	0 730	..	37·72	245	162
Penistone (Ingbirchworth Res.)	J. R. Fox, Esq., C.E.	5	1	0 853	38·3	49·15	232	154
Penistone (Broadstone Res.)	J. R. Fox., Esq., C.E.	5	1	0 ..	..	43·87	224	162
D Barnsley (Jordan Hill)	J. R. Fox, Esq., C.E.	5	1	0 460	26·2	29·63	218	142
D Cawthorne (Cannon Hall)	J.M.Spencer Stanhope, Esq.	5	0	11 418	28·8	31·11	183	131
D Barnsley (Burntwood Hall)	J. Dymond, Esq.	5	1	0 378	..	29·85	186	152
D Kirk Bramwith	C. E. Farran, Esq., C.E. ..	5	1	0 17	..	27·45	159	132
D Ackworth School	The Headmaster	8	1	0 100	25·1	25·99	165	119
D Goole	Aire & Calder Navigation .	5	1	0 18	22·9	25·93	185	134
8.—OUSE—Aire—Calder. 361 sq. mi.								
D Holmbridge (Yateholme Res.)	W.H. Duckworth,Esq.,C.E.	5	1	0 1009	60·1	76·29	236	197
D Holmbridge (Yateholme Farm)	W.H. Duckworth, Esq., C.E.	5	1	0 861	57·9	73·24	236	192
Holmbridge (Bilberry Res.)	Messrs.Mallinson&Son,C.E.	5	1	0 970	55·9	63·20	..	..
Holmfirth (Holme Styes Res.)	Messrs.Mallinson &Son,C.E.	5	2	0 830	45·9	52·60	..	..
Holmfirth (Boshaw Whams R.)	Messrs. Mallinson&Son,C.E.	5	1	0 930	49·6	57·70	..	..
D Holmfirth (Thongsbridge)	E. M. Robson, Esq.	8	1	0 ..	..	54·08	214	177
Meltham (Harden Moss)	J. W. Armitage, Esq., C.E.	8	1	0 1212	47·1	55·17	..	..
Meltham (Harden Moss) *new g.*	J. W. Armitage, Esq., C.E.	8	1	0 1212	..	57·86	..	..
Wessenden Head *new g.*	J. W. Armitage, Esq., C.E.	8	1	0 1200	..	49·63	..	..
Wessenden (Old Reservoir)	J. W. Armitage, Esq., C.E.	8	1	0 940	..	48·48	..	..
Wessenden (Butterley Moss)	J. W. Armitage, Esq., C.E.	8	1	0 1110	..	52·72	..	..
Wessenden (Bobus)	J. W. Armitage, Esq., C.E.	5	1	0 1200	43·4	50·30	..	..
Meltham (Brow Grains)	J. W. Armitage, Esq., C.E.	8	1	0 900	45·6	53·04	..	..
Meltham (Royd Edge)	C. L. Brook, Esq.	8	1	0 585	49·0	57·57	..	..
D Meltham (Harewood Lodge)	C. L. Brook, Esq.	8	1	0 513	44·7	53·70	238	173
Meltham Grange	J. W. Armitage, Esq., C.E.	8	1	0 880	41·2	49·03	..	..
Marsden Reservoir*	L. M. & S. Rly.	8	2	4 692	..	59·79	..	..
Marsden (Deer Hill)	J. W. Armitage, Esq., C.E.	8	1	0 1149	43·3	54·72	..	..
Marsden (Deer Hill) *new g.*	J. W. Armitage, Esq., C.E.	8	1	0 1149	45·5	56·27	..	..
D Slaithwaite (Blackmoorfoot)	J. W. Armitage, Esq., C.E.	8	1	0 800	44·1	48·44	269	187
D Slaithwaite (Inglewood)	J. Woodhead, Esq.	5	1	0 546	45·5	53·14	246	182

* Gauge on a steep bank.

DIVISION IX.—YORKSHIRE—(*con.*).

	STATIONS.	AUTHORITIES.	Diam.	Rain-gauge Height of Rim above Ground.	Height of Ground above Sea Level.	Average Rainfall.	1928 Rainfall.	Days with ·01 in. or more.	Days with ·04 in. or more.
	WEST RIDING—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
	8.—CUSE—Aire—Calder—(*con.*).								
d	Huddersfield (Bank Field, Golcar)	Miss M. J. R. Sykes	6	1 0	400	40·2	(45·16)	..	..
D	Huddersfield (Ravensknowle)	C. Mosley, Esq.	8	0 11	325	..	35·72	213	153
w	Huddersfield (Langley Ter.)(No.1)	S. Morris Bower, Esq.	5	1 0	772	..	40·12	..	..
	Huddersfield (Croslands Rd.)(No.2)	S. Morris Bower, Esq.	4	1 0	761	..	43·44	..	..
D	Huddersfield (Oakes)	S. Morris Bower, Esq.	5	1 0	761	..	42·69	234	167
w	Moss Moor (Linsgreave)	C. Clemesha Smith, Esq., C.E.	5	1 0	1264	..	61·48	..	..
D	Rishworth (G. Walden Edge) *old*	C. Clemesha Smith, Esq., C.E.	8	1 2	1135	40·2	59·74	246	192
D	Rishworth (G. Walden Edge) *new*	C. Clemesha Smith, Esq., C.E.	5	1 0	1078	49·2	57·98	240	195
w	Rishworth (Stott Hall) ....*old*	C. Clemesha Smith, Esq., C.E.	8	1 0	937	..	57·49	..	..
w	Rishworth (Stott Hall) ..*new*	C. Clemesha Smith, Esq., C.E.	5	1 0	935	..	56·62	..	..
D	Rishworth (Ringstone Res.)(No.1)	C. Clemesha Smith, Esq., C.E.	5	1 0	980	42·6	56·58	239	192
D	Rishworth (Ringstone Res.)(No.2)	C. Clemesha Smith, Esq., C.E.	5	1 0	962	42·6	51·78	239	178
w	Rishworth Moor (Greystones)	C. Clemesha Smith, Esq., C.E.	5	1 4	1192	..	65·01	..	..
d	Soyland Moor (Rishworth Drain)	C. J. Batley, Esq., C.E.	8	1 0	1290	..	66·84	..	..
w	Soyland Moor (Summit)(No. 1)	C. Clemesha Smith, Esq., C.E.	5	1 0	1280	..	56·29	..	..
w	Soyland Moor (Summit)(No. 2)	C. Clemesha Smith, Esq., C.E.	5	0 11	1218	..	64·76	..	..
D	Soyland Moor (Baitings Gate)	C. Clemesha Smith, Esq., C.E.	5	1 0	943	50·1	60·74	235	188
d	Soyland Moor (Byron Edge)	C. J. Batley, Esq., C.E.	8	1 0	1251	..	59·81	..	..
w	Soyland Moor (Manshead)	C. Clemesha Smith, Esq., C.E.	5	1 0	1225	..	62·06	..	..
d	Walsden (White Holme)	C. J. Batley, Esq., C.E.	8	1 0	1240	..	57·51	..	..
D	Walsden (Calf Lee)	Rochdale Corporation	10	1 6	960	39·6	58·84	247	192
D	Walsden (Warland Res.)	Rochdale Corporation	8	1 5	1250	..	71·58	254	202
D	Walsden (Warland Drain)	Rochdale Corporation	8	1 5	1250	..	74·43	249	200
	Walton Hall	E. J. Simpson, Esq.	5	0 10	137	..	23·59	..	..
D	Horbury (Addingford Hos.)	J. H. Horsfall, Esq.	8	2 0	169	..	29·57	178	128
	Horbury (Highfields)	J. H. Green, Esq.	5	1 0	226	..	30·43	..	..
D	Mirfield (Cote Wall)	F. P. Mitchell, Esq.	8	1 0	200	..	36·26	211	151
d	Wakefield (Northgate)	J. H. Garner, Esq.	8	1 0	174	..	25·17	..	116
D	Wakefield (Clarence Park)	C. Clemesha Smith, Esq., C.E.	5	1 0	124	25·4	27·28	200	136
D	Wakefield (Fieldhead Res.)	C. Clemesha Smith, Esq., C.E.	5	1 0	250	..	26·86	164	131
D	Normanton (Haw Hill Park)	The Surveyor, U.D.C.	8	1 1	136	..	26·56	199	133
D	Sowerby Br. (Haugh End) No.4	S. G. C. Rawson, Esq.	5	1 0	450	41·9	48·99	207	170
D	Walsden (Ramsden Reservoir)	Rochdale Corporation	8	1 0	993	..	66·12	229	186
D	Cragg (Green Withens Res.)	C. Clemesha Smith, Esq., C.E.	5	1 0	1205	..	58·96	255	197
D	Todmorden (Fielden Hospital)	F. Rogers, Esq.	5	1 0	650	..	58·61	258	200
D	Todmorden (Sourhall Hospital)	F. Rogers, Esq.	5	1 0	1020	54·1	67·79	236	192
D	Halifax (Public Library)	E. Green, Esq.	8	1 0	625	34·7	41·43	232	165
D	Batley (Staincliffe Reservoir)	W. H. Duckworth, Esq., C.E.	5	1 0	492	..	30·66	191	141
D	Ardsley Reservoir .....No. 1	C. Clemesha Smith, Esq., C.E.	5	1 2	395	..	29·49	197	136
D	Ardsley Reservoir .....No. 2	C. Clemesha Smith, Esq., C.E.	5	1 2	326	..	29·65	197	137
D	Ardsley (Jaw Hill Filters)	C. Clemesha Smith, Esq., C.E.	5	1 0	315	..	28·21	155	123
D	Halifax W.W. (Albert)	E. P. Brook, Esq., C.E.	5	1 0	795	36·4	45·89	233	165
D	Halifax W.W. (Gibbet)	E. P. Brook, Esq., C.E.	5	1 0	568	35·9	44·17	215	168
D	Halifax W.W. (Ramsden Wood)	E. P. Brook, Esq., C.E.	5	1 0	815	..	48·92	216	163
D	Hebden Bridge (Burnside)	Miss M. Hoyle,	5	1 0	850	44·2	54·23	248	186
D	Halifax W.W. (Castle Carr Lo.)	E. P. Brook, Esq., C.E.	5	1 0	1060	41·3	51·57	248	183
w	Halifax W.W. (Midgley Mr.) *New*	E. P. Brook, Esq., C.E.	8	1 0	1350	47·5	54·50	..	..
w	Halifax W.W. (Warley Mr.) *New*	E. P. Brook, Esq., C.E.	8	1 0	1325	44·9	50·53	..	..
D	Halifax W.W. (Ogden)	E. P. Brook, Esq., C.E.	5	1 0	990	43·4	52·48	226	172
w	Halifax W.W. (Ovenden Mr.) *New*	E. P. Brook, Esq., C.E.	8	1 0	1375	45·7	52·07	..	..
w	Halifax W.W. (Gorpie)	E. P. Brook, Esq., C.E.	8	1 0	1320	..	59·00	..	..
D	Halifax W. W. (Gorple Res.)	E. P. Brook, Esq. C.E.	5	1 6	1028	..	53·59	250	195
D	Halifax W.W. (Widdop)	E. P. Brook, Esq., C.E.	5	1 0	1050	47·1	54·13	242	187
D	Hal. W.W. (Walshaw Dean Lo.)	E. P. Brook, Esq., C.E.	5	1 0	1040	48·8	56·07	237	186
w	Halifax W.W. (Walshaw Dean)	E. P. Brook, Esq., C.E.	8	1 0	1380	45·9	57·78	..	..
	9.—OUSE—Aire. 504 sq. mi.								
D	Pontefract (The King's School)	A. Hudson, Esq.	5	1 0	188	..	27·03	180	129
D	Pontefract Sewage Works	W. H. Newton, Esq., C.E.	5	1 0	49	..	25·22	170	121
D	Pontefract (Roall W.W.)	W. H. Newton, Esq., C.E.	8	1 0	42	..	25·70	189	129
	Bradford (Grange Rd., Horton)	A. E. Chilton, Esq.	5	3 0	450	35·0	39·48	217	155
	Bradford (Brayshaw Reservoir)	L. Mitchell, Esq., C.E.	5	1 0	982	37·1	45·69	..	..
	Bradford (Lister Park)	Mr. J. Moorby	8	1 0	439	31·4	43·31	215	155

DIVISION IX.—YORKSHIRE—(*con.*).

	STATIONS.	AUTHORITIES.	Rain-gauge Diam.	Height of Rim above Ground.	Height of Ground above Sea Level.	Average Rainfall.	1928 Rainfall.	Days with ·01 in. or more.	Days with ·04 in. or more.
	WEST RIDING—(*con.*)		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
	9.—OUSE—Aire—(*con.*).								
D	Bradford (Thornton Moor Filters)	L. Mitchell, Esq., C.E. ...	5	1 0	1190	43·9	58·87	251	196
D	Bradford (Stubden Res.) No. 8.	L. Mitchell, Esq., C.E. ...	5	1 0	1071	44·9	55·40	233	185
M	Bradford (Nan Scar, Oxenhope)	L. Mitchell, Esq., C.E.....	5	1 0	1101	46·9	60·85	..	..
M	Bradford (Stairs Top, Oxenh'pe)	L. Mitchell, Esq., C.E. ...	5	1 0	1360	47·9	65·10	..	..
D	Bradford (Leeming Reservoir)	L. Mitchell, Esq., C.E. ...	5	1 0	850	40·6	54·35	235	180
M	Bradford (Doe Park Reservoir)	L. Mitchell, Esq., C.E. ...	5	1 0	760	40·7	49·84	..	..
M	Bradford (Leeshaw Res.)	L. Mitchell, Esq., C.E. ...	5	1 0	875	48·2	60·08	..	..
D	Bradford (Chellow Dean Res.)	L. Mitchell, Esq., C.E. ...	5	1 0	645	35·6	44·76	214	165
D	Bradford (Chellow Heights Res.)	L. Mitchell, Esq., C.E. ...	5	1 0	848	36·6	43·53	233	171
	Bradford (Hewenden Res.)	L. Mitchell, Esq., C.E. ...	5	1 0	701	38·6	48·73	..	..
M	Bradford (Heaton Reservoir)	L. Mitchell, Esq., C.E. ...	5	1 0	531	32·1	41·93	..	..
	Leeds (Wortley Reservoir)	H. Shortreed, Esq., C.E. ..	8	0 9	307	29·3	33·65	201	152
	Leeds (Knostrop)	H. Shortreed, Esq., C.E. ..	8	0 9	72	..	25·56	167	114
	Leeds (Great George Street)	H. Shortreed, Esq., C.E. ..	5	0 9	180	..	30·64	183	136
d	Leeds (Kingfisher)	Greevz Fysher, Esq.	5	14 0	247	..	32·76	188	130
	Leeds (Woodhouse Moor)	H. Shortreed, Esq., C.E. ..	8	0 9	307	26·7	33·58	222	143
D	Seacroft (Leeds City Hospital)	Dr. J. S. Anderson	8	1 0	236	..	32·25	197	131
	Leeds (Weetwood Res.)	H. Shortreed, Esq., C.E. ..	8	0 9	328	..	33·43	218	146
d	Leeds (Weetwood Garth)	Mrs. F. Gott, J.P.	5	1 0	300	..	33·55	..	142
	Leeds (Weetwood)	F. J. Kitson, Esq.	5	2 0	250	..	34·17	192	142
d	Leeds (Harrogate Road)	Greevz Fysher, Esq.	5	1 0	400	..	31·68	(196)	(128)
	Leeds (Allerton Hill)	T. Harding Churton, Esq....	5	0 8	418	27·5	31·83	..	..
D	Shipley (Glenholme)	M. E. Burton, Esq.	5	0 9	370	..	39·62	..	..
D	Haworth (Harbour Lodge)	M. R. Barnett, Esq., C.E. .	8	1 0	1187	52·7	63·43	237	195
D	Haworth (Lower Laithe Res.) (+A)	M. R. Barnett, Esq., C.E.	6	0 10	772	..	58·86	241	178
D	Oakworth (Oldfield Filters)	M. R. Barnett, Esq., C.E. .	5	1 0	1008	..	55·76	229	181
D	Bingley (Sewage Works)	J. R. Brown, Esq.	5	1 1	227	..	43·64	212	170
D	Rawdon	Rawdon U.D.C.	5	1 0	579	..	36·05	207	149
D	Bingley (Gilstead Filters)	L. Mitchell, Esq., C.E. ...	5	1 0	572	29·3	40·68	214	159
D	Keighley (The Knowle)	P. Clough, Esq.	5	1 0	390	..	59·30	227	177
D	Keighley (Victoria Park)	Mr. R. Butterfield	5	1 0	304	..	41·58	211	157
D	Bingley (East Morton)	J. Rhodes, Esq.	5	1 0	530	..	39·23	225	167
	Bingley (Sunnydale Reservoir)	L. Mitchell, Esq., C.E. ...	5	1 0	825	33·8	39·13	..	..
D	Salterforth (Barnoldswick W.W.)	J. P. Thompson, Esq. ...	8	1 4	832	..	57·51	219	185
D	Earby (Sewage Works) (+A)	H. Pritchard, Esq.	5	1 9	425	..	50·22	217	157
M	Silsden (Gill Grange)	L. Mitchell, Esq., C.E. ...	5	1 0	883	31·6	37·83	..	..
D	Silsden Reservoir	L. Mitchell, Esq., C.E. ...	5	1 0	560	31·0	42·32	222	179
M	Silsden (Cringles Res. Site)	L. Mitchell, Esq., C.E. ...	5	1 0	715	32·3	41·80	..	..
D	Elslack (Stories Farm)	J. P. Thompson, Esq. ...	5	0 7	675	..	48·05	198	161
	Carleton (Beech Hill)	W. Cyril Empson, Esq. ..	8	1 3	425	..	50·46	..	..
D	Skipton (Town Hall) (+A)	A. E. W. Aldridge, Esq. ..	6	1 6	367	..	42·62	210	170
	Gargrave (Banks Hill Bank Nwtn)	Leeds & Liv'pool Canal Co.	8	1 0	545	..	44·48	..	..
	Gargrave (Ray Bridge Hill)	Leeds & Liv'rpool Canal Co	8	0 10	459	..	45·58	..	..
D	Rylstone Rectory	Rev. C. H. Lowe	6	0 10	700	..	47·17	238	173
	Winterburn (Long Hill)	Leeds & Liv'pool Canal Co.	8	0 9	705	..	50·40	..	..
	Winterburn (Brown Hill)	Leeds & Liv'pool Canal Co.	8	1 0	961	..	56·72	..	..
D	Malham Tarn	John Winskill, Esq.	5	1 0	1296	57·5	70·82	187	181
	10.—OUSE—Wharfe. 408 sq. mi.								
D	Aberford (Lotherton Hall)	Col. R. T. T. Gascoigne, D.S.O.	5	1 0	208	..	29·42	197	129
d	Bolton Percy (Nun-Appleton Hall)	Ben Dawson, Esq.	5	1 4	25	..	27·89	180	136
D	Appleton Roebuck School	W. Clayton, Esq.	5	1 6	23	..	29·04	191	140
	Adel (Eccup, East)	H. Shortreed, Esq., C.E. ..	8	0 9	375	..	37·51	226	156
	Harewood (Arthington)	H. Shortreed, Esq., C.E. ..	8	0 9	139	..	34·21	224	161

DIVISION IX.—YORKSHIRE—(*con.*).

	STATIONS.	AUTHORITIES.	Rain-gauge Diam.	Height of Rim above Ground.	Height of Ground above Sea Level.	Average Rainfall.	1928 Rainfall.	Days with ·01 in. or more.	Days with ·04 in. or more.
	WEST RIDING—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
	10.—OUSE—Wharfe.—(*con.*).								
D	Harewood House	Countess of Harewood	5	0 10	300	..	39·98	190	158
D	Otley (Sewage Works)	C. F. Hodgson, Esq., C.E.	5	1 0	172	..	32·43	173	138
D	Ilkley (Silverwell Cottage)	Surveyor, U.D.C.	5	1 0	900	..	46·96	231	176
D	Ilkley (Spence's Garden)	Surveyor, U.D.C.	5	1 0	314	..	42·46	224	161
D	Ilkley (Ben Rhydding)	T. More, Esq.	5	1 0	316	..	39·90	223	161
	Leathley (Lindley Wood, S.)	H. Shortreed, Esq., C.E.	8	0 9	312	..	36·67	215	153
D	Ilkley (March Gill Reservoir)	C. F. Hodgson, Esq., C.E.	5	1 0	655	..	40·23	260	156
D	York (Chalfonts)	Arnold S. Rowntree, Esq.	5	0 9	50	..	30·52	182	142
d	York (Cherry Hill)	Messrs. H. Richardson & Co.	5	1 6	50	24·2	26·87	..	..
D	York (Acomb Landing)	W. H. Humphreys, Esq. C.E.	5	1 0	40	..	26·98	163	129
M	Skipton (Counter Hill)	L. Mitchell, Esq., C.E.	5	1 0	951	31·3	40·24	..	..
M	Skipton (Chelker Reservoir)	L. Mitchell, Esq., C.E.	5	1 0	730	32·9	42·19	..	..
	Fewston (Timble Ings)	H. Shortreed, Esq., C.E.	8	0 9	912	..	44·62	236	165
	Fewston (Swinsty, East)	H. Shortreed, Esq., C.E.	8	0 9	460	..	41·03	208	150
	Fewston, North	H. Shortreed, Esq., C.E.	8	0 9	525	..	39·92	247	162
	Fewston (Blubberhouses)	H. Shortreed, Esq., C.E.	8	0 9	575	..	43·59	237	167
D	Bolton Abbey Estate Office	A. Downs, Esq.	5	1 2	368	..	42·26	219	175
D	Barden Reservoir	L. Mitchell, Esq., C.E.	5	1 0	746	42·9	52·24	245	178
M	Upper Barden Reservoir	L. Mitchell, Esq., C.E.	5	1 0	1170	40·6	48·32	..	..
	Thruscross (Lane Head)	H. Shortreed, Esq., C.E.	8	0 9	950	..	41·32	229	167
M	Burnsall (Thorpe Fell)	L. Mitchell, Esq., C.E.	5	1 0	1661	39·4	49·79	..	..
M	Burnsall (Sandbed Beck)	L. Mitchell, Esq., C.E.	5	1 0	676	42·2	56·80	..	..
D	Burnsall Rectory	Rev. Canon W. J. Stavert	8	4 6	504	..	55·23	239	181
D	Grimwith Reservoir	L. Mitchell, Esq., C.E.	5	1 0	893	44·9	54·29	247	193
M	Grimwith (Trunla Hill)	L. Mitchell, Esq., C.E.	5	1 0	1201	38·8	57·70	..	..
D	Buckden	G. E. Clayton, Esq.	5	3 0	800	..	72·05	225	191
D	Oughtershaw Hall	Miss G. J. Woodd	5	1 6	1175	..	90·86	252	198
	11.—OUSE—Nidd. 254 sq. mi.								
D	Wetherby (Stockeld Park)	G. R. Foster, Esq.	5	1 2	200	..	34·34	180	156
	Spofforth (Sewage Works)	C. E. Rivers, Esq., C.E.	5	1 0	198	..	34·09	208	143
D	Wetherby (Ribston Hall)	Mr. W. Simpson	5	1 2	130	26·5	32·56	167	142
M	Harrogate W.W. (Ling Cottage)	A. S. West, Esq., C.E.	5	1 0	740	..	41·04	..	..
M	Harrogate W.W. (Broad Dubb)	A. S. West, Esq., C.E.	5	1 0	725	..	42·55	..	..
M	Harrogate W.W. (Cobblers Cott.)	A. S. West, Esq., C.E.	5	1 0	730	..	42·09	..	..
D	Harrogate W.W. (Ten Acres Res.)	A. S. West, Esq., C.E.	8	1 6	620	..	38·64	221	157
D	Harrogate W.W. (Scargill Res.)	A. S. West, Esq., C.E.	8	1 0	646	..	39·60	224	165
D	Harrogate W.W. (Beaver Dyke R)	A. S. West, Esq., C.E.	8	0 11	575	..	37·49	221	157
M	Harrogate W.W. (John o'Gaunts)	A. S. West, Esq., C.E.	5	1 0	600	..	41·87	..	..
M	Harrogate W.W. (Knab's Moor)	A. S. West, Esq., C.E.	5	1 0	700	..	39·15	..	..
D	Harrogate (Harlow Moor Obsy.)	C. E. Rivers, Esq., C.E.	5	1 0	478	30·6	34·82	204	137
D	Harrogate (Harlow Hill Res.)	A. S. West, Esq., C.E.	8	1 0	589	..	36·69	207	146
d	Harrogate (Duchy Road)	J. S. Farrah, Esq.	5	1 0	450	..	37·40	(200)	(146)
D	Harrogate (Irongate Bridge Res.)	A. S. West, Esq., C.E.	8	1 6	455	..	41·10	214	157
M	Harrogate (Ellison's Farm)	A. S. West, Esq., C.E.	5	1 0	700	..	42·27	..	..
D	Knaresborough (Goldsbro Hall Gdns)	Mr. R. Wilson	5	1 0	112	..	32·37	209	145
D	Knaresborough (The Abbey)	Rev. Canon J. T. Hartley	5	1 0	140	..	32·10	216	153
	Knaresborough (Water Tower)	A. S. West, Esq., C.E.	8	1 0	240	..	35·13	186	132
	Harrogate (Bilton Sewage Works)	C. E. Rivers, Esq., C.E.	5	1 0	208	..	36·82	198	156
d	Nun Monkton	W. R. Bagley, Esq.	5	2 0	46	..	(31·83)	..	..
D	Birstwith Hall	F. A. Aykroyd, Esq.	5	1 6	375	..	42·29	210	161
D	Birstwith (Swarcliffe)	Capt. C. S. Greenwood	5	1 0	510	..	40·39	197	151
	Ramsgill (Holme Ho. Gouthwaite)	L. Mitchell, Esq., C.E.	5	1 0	464	..	47·17	..	..
D	Ramsgill (Raygill House)	L. Mitchell, Esq., C.E.	5	1 0	925	48·0	49·87	209	184
D	Ramsgill	L. Mitchell, Esq., C.E.	5	1 0	450	39·4	54·44	186	167
M	Nidderdale (East Gill Head)	L. Mitchell, Esq., C.E.	5	1 0	1710	58·6	71·79	..	..
M	Nidderdale (Rain Stang)	L. Mitchell, Esq., C.E.	5	1 0	1470	48·6	61·01	..	..
D	Nidderdale (New Houses)	L. Mitchell, Esq., C.E.	5	1 0	755	45·3	58·72	193	177
D	Nidderdale (West Houses)	L. Mitchell, Esq., C.E.	5	1 0	1165	53·1	63·50	225	198

DIVISION IX.—YORKSHIRE—(*con.*).

	STATIONS.	AUTHORITIES.	Rain-gauge Diam.	Height of Rim above Ground.	Height of Ground above Sea Level.	Average Rainfall.	1928 Rainfall.	Days with .01 in. or more.	Days with .04 in. or more.
	WEST RIDING—(*con.*)		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
	12.—OUSE—Ure. 110 sq. mi.								
	Dallow Moor (Harper Hill)	H. Shortreed, Esq., C.E.	8	0 9	858	..	38·34	170	161
d	Ripon (Studley Royal Gardens)	F. M. Sutherland, Esq.	5	1 6	325	..	(30·91)	..	..
D	Ripon (The Red House)	F. D. Wise, Esq., C.E.	5	1 0	120	..	30·90	197	137
	Kirby Malzeard (Drovers' Inn)	H. Shortreed, Esq., C.E.	8	0 9	576	..	44·94	232	158
	Kirby Malzeard (Hawsett)	H. Shortreed, Esq., C.E.	8	0 9	820	..	45·56	236	169
	KirbyMalzeard(Hambledon H.)	H. Shortreed, Esq., C.E.	8	0 9	1100	..	48·95	..	..
	Kirby Malzeard (BagwithBrae)	H. Shortreed, Esq., C.E.	5	0 9	703	..	38·07	241	162
w	Kirby M.(Stone & EarsWham)	H. Shortreed, Esq., C.E.	8	0 9	1118	..	43·42	..	..
	EAST RIDING. (Area, 1,176 sq. mi.).								
	1.—OUSE—Left Bank Tributaries. 82 sq. mi.								
D	Osgodby (Fruit Testing Stn.)	J. W. Eves, Esq.	5	1 0	30	..	28·05	184	139
D	York (Heslington)	Hn.L.de Yarburgh-Bateson	8	0 9	35	..	28·91	203	142
D	York (Dunnington Hall)	Miss E. C. Hildyard	8	1 2	110	..	29·40	223	146
	2.—OUSE—Derwent. 248 sq. mi.								
D	Elvington (Woodhouse Grange)	A. T. Coulson, Esq.	5	1 0	39	..	24·14	156	115
D	Birdsall Gardens	Mr. J. Anderson	5	1 2	303	..	33·72	174	151
D	Westow Vicarage	Rev. G. T. W. Purchas	5	1 6	190	..	32·01	220	130
D	Rillington (Scampston Hall)	W. H. St. Quintin, Esq.	5	1 6	102	..	30·74	213	153
D	Ganton (Ganton Hall)	Harold Wrigley, Esq.	5	1 0	250	..	29·98	224	152
	Hunmanby (Holly Bank)	Miss H. A. Ackland	5	1 0	225	..	25·64	..	..
	3.—HUMBER—Left Bank Tributaries. 675 sq. mi.								
D	Spurn Head *New g.*	The Meteorological Office	8	1 0	29	24·0	19·88	186	120
D	Patrington (Rose Cottage)	The Meteorological Office	5	1 3	46	23·3	23·09	170	124
D	Hull (Pearson Park)	H. B. Witty, Esq.	5	0 10	8	25·4	26·51	222	135
D	Hull (Springhead)	W. D. Bingham, Esq.	5	1 0	16	..	27·85	204	137
D	Cottingham (Waterworks)	W. D. Bingham, Esq.	5	1 0	26	..	26·87	180	131
D	Holme-on-Spalding Moor	C. J. Pybus, Esq.	8	1 0	30	..	26·62	196	145
D	Beverley(E.Riding Mental Hosp.)	Medical Superintendent	5	1 0	175	..	29·15	203	134
	Beverley (New Walk)	W. Evans, Esq., C.E.	5	3 0	38	..	29·73	203	145
	Beverley (Hull Bridge)	W. Evans, Esq., C.E.	5	2 6	11	..	26·50	191	142
D	MarketWeighton(DaltonHolme)	J. P. Jobling Esq.	8	6 0	120	..	30·30	200	144
	Brandesburton (HempholmLk.)	W. Evans, Esq., C.E.	5	1 0	11	25·2	26·30	193	144
D	Driffield (Council School)	A. T. Jordan, Esq.	5	1 0	69	..	27·78	214	155
D	Lowthorpe (The Elms)	F. K Hawes, Esq.	5	1 0	63	26·5	24·80	196	135
	4.—EAST COAST STREAMS. 171 sq. mi.								
D	Bridlington (Corpn. Nurseries)	S. R. Crofts, Esq.	5	1 0	60	..	27·28	208	142
D	Bridlington (Grammar School)	The Headmaster	8	1 0	76	..	25·35	178	117
	Burton Fleming	C. B. Thomas, Esq.	5	1 0	150	..	27·98	..	..
D	Ganton (Willerby Wold)	Major W. F. Wormald	5	0 9	565	..	27·09	198	146
D	Filey Vicarage	Rev. Canon A. N. Cooper	8	1 0	96	..	26·66	204	140
	NORTH RIDING. (Area, 2,155 sq. mi.)								
	1.—OUSE—Ure. 273 sq. mi.								
D	West Tanfield Rectory	Mr. H. H. Milman	5	1 0	150	..	31·50	195	128
D	Masham Moor (Roundhill Res.)	A. S. West, Esq., C.E.	8	1 0	743	..	50·46	266	190
	Masham Moor (Somerside)	H. Shortreed, Esq., C.E.	5	0 9	928	..	48·32	221	190
	Masham Moor (Leighton Res.)	H. Shortreed, Esq., C.E.	5	0 9	634	..	35·49	231	161
	Masham Moor (Towler Hill)	H. Shortreed, Esq., C.E.	8	0 9	820	..	41·68	254	168
	Masham Moor (Breary Bank)	H. Shortreed, Esq., C.E.	5	0 9	600	..	45·47	255	179
	Masham Moor (Healey Pasture)	H. Shortreed, Esq., C.E.	5	0 9	620	..	43·45	252	168
	Masham Moor (Low Houses)	H. Shortreed, Esq., C.E.	5	0 9	693	..	46·33	266	190

DIVISION IX.—YORKSHIRE—(*con.*).

STATIONS.	AUTHORITIES.	Rain-gauge Diam.	Rain-gauge Height of Rim above Ground.	Rain-gauge Height of Ground above Sea Level.	Average Rainfall.	1928 Rainfall.	1928 Days with ·01 in. or more.	1928 Days with ·04 in. or more.
NORTH RIDING—(*con.*)		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
1.—OUSE—Ure—(*con.*).								
D Clifton Castle Gardens	Lady Cowell	5	1 0	360	..	31·99	180	130
Middleham (Cotescue)	A. Rowntree, Esq.	5	1 0	600	..	(35·63)	(190)	(154)
D Middleham (Castle Hill)	Col. P. H. Hammond, C.B.	5	1 0	470	..	36·58	200	137
D West Witton (Ivy House)	J. B. Espiner, Esq.	5	1 0	605	..	42·80	224	166
Leyburn (Spennithorne)	F. M. Curtis, Esq.	5	1 0	416	..	35·93	..	..
D Leyburn (Bolton Hall)	Mr. F. Scrivener	8	1 0	420	32·6	40·77	227	154
D Askrigg (Worton)	Rev. W. M. Atkinson	5	1 0	700	..	54·10	232	172
D Hawes (The Stone House)	H. Arden Crallan, Esq.	5	1 6	845	..	70·16	215	192
2.—OUSE—Swale. 569 sq. mi.								
D Dalton Parsonage	Rev. G. H. Chilman	5	1 0	79	..	26·38	171	124
d Baldersby Vicarage	Rev. T. W. Foulkes, M.A.	5	1 2	80	..	31·20	..	146
d Coxwold (The Old Hall)	H. Geipel, Esq.	4	1 6	260	..	29·43	..	131
Burniston (Camp Hill) (R)	Capt. F. H. Reynard	8	3 6	152	..	24·50	..	..
d Thirsk (Sowerby)	Mrs. W. Brown	5	1 0	110	..	27·18	..	125
D Thirsk (Brynkellhow)	A. B. Hall, Esq.	8	1 0	115	..	24·78	183	115
D Thirsk (Stoneybrough)	T. J. Foggitt, Esq.	5	1 2	122	..	26·67	180	118
M Felixkirk (Thirlby)	A. J. Walker, Esq.	5	1 0	339	..	28·15	..	..
D Felixkirk (Mount St. John)(+A)	A. J. Walker, Esq.	5	1 0	523	..	28·51	201	128
D Felixkirk (Mount St. John)	A. J. Walker, Esq.	5	1 0	542	26·5	28·21	202	126
D Boltby (Ravensthorpe Manor)	F. E. Walker, Esq.	5	1 7	661	..	29·16	194	133
M Boltby, East	A. J. Walker, Esq.	5	1 0	460	..	30·55	..	..
M Boltby (High Paradise)	A. J. Walker, Esq.	5	1 3	1144	..	37·20	..	..
D Bedale (The Hermitage)	C. Clarke, Esq., F.S.I.	5	0 10	465	..	28·45	152	123
D Maunby Hall	Major A. Hill-Walker, V.C.	5	1 0	90	..	26·15	155	129
D Bedale (Park House)	Miss M. Greenwood	5	1 1	180	..	28·34	178	129
Scruton Hall	Rev. A. T. Coore	5	1 6	110	..	25·38	183	121
M Swaledale (Gunnerside Lodge)	W. M. Christy, Esq.	5	1 0	900	..	65·59	..	..
D Northallerton (Brompton)	J. P. Yeoman, Esq.	5	1 0	165	..	26·64	226	137
Osmotherly (Oakdale W.W.)	The Surveyor, U.D.C.	5	1 0	600	..	30·42	..	..
d East Harlsey (Harlsey Hall)	Mrs. Constantine	5	1 0	370	..	24·03	..	..
d Richmond (C.E. School)	R. Hornby, Esq.	5	1 0	360	..	36·38	..	..
D Reeth (Arkengarthdale)	Samuel Gott, Esq.	5	1 0	940	..	54·52	203	182
D Rounton Grange	Sir Hugh Bell, Bt.	8	1 0	249	25·6	25·26	199	130
W Middleton Tyas	J. F. B. Baker, Esq.	5	0 10	380	..	29·71	..	..
3.—OUSE—Left Bank Tributaries. 153 sq. mi.								
D York (Museum Gardens)	W. Watson, Esq.	5	1 0	56	24·3	27·40	191	133
d Stockton-on-Forest(StocktonHall)	Mrs. Lloyd	5	1 3	30	..	25·68	..	117
Haxby (Moorlands)	E. G. Tew, Esq.	6	1 0	59	..	27·02	..	..
d Crayke Rectory	Rev. T. Catton	5	1 0	201	..	25·16	(183)	(121)
4.—CUSE—Derwent. 509 sq. mi								
d Welburn	R. Child, Esq.	5	1 0	190	..	28·47	..	123
D Malton (Broughton Rise)	C. C. Laverack, Esq.	5	1 0	164	..	29·07	199	141
D Hovingham Hall	Capt. W. A. Worsley	5	0 9	119	..	34·30	198	163
D Ampleforth College	The Procurator	6	1 0	350	..	27·07	190	131
D Oswaldkirk (Layesthorpe Hall)	Major G. B. Foster	5	1 0	231	..	29·98	181	136
D Helmsley (Boys' School)	E. W. Williams, Esq.	5	1 0	225	..	33·29	184	143
D Pickering (Hungate Hall)	Dr. J. L. Kirk	5	1 0	90	..	28·50	194	146
D Seamer (Irton Pump. Station)	H. Richardson, Esq., C.E.	8	1 0	94	..	28·47	181	146
D Scarborough (Osgodby)	H. Richardson, Esq., C.E.	8	1 0	166	26·1	26·95	167	154
D East Ayton(Derwent House)	A. H. Robinson, Esq.	5	1 0	110	..	31·09	201	158
d Kirkby Moorside(Ravenswyke)	Harrison Holt, Esq.	5	1 0	220	..	29·77	..	135
D Thornton Dale (High Dalby Ho.)	J. A. Coulson, Esq.	5	1 0	325	..	31·31	178	140
5.—ESK & C. 278 sq. mi.								
D Scarborough	Medical Officer of Health	5	1 1	118	25·8	27·70	214	150
D Scarborough (Scalby)	Capt. W. H. L. Wordsworth	5	1 0	210	..	29·65	198	141
D Scarborough(ScalbySt.Philips)	Rev. W. E. Stewart	5	1 0	130	..	27·65	199	139
M Goathland (Thwaitefield)	L. G Rowland, Esq.	5	1 0	485	..	30·13	..	..

DIVISION IX.—YORKSHIRE—(*con.*).

	STATIONS.	AUTHORITIES.	Rain-gauge Diam.	Height of Rim above Ground.	Height of Ground above Sea Level.	Average Rainfall.	1928 Rainfall.	Days with ·01 in. or more.	Days with ·04 in. or more.
	NORTH RIDING—(*con.*)		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
	5.—ESK & C.—(*con.*).								
D	Egton Bridge (Bridgeholme)	Lt.-Col. R. Astley Smith..	5	1 0	100	..	35·06	177	152
D	Glaisdale (The Gables Gardens)	Mr. H. Hope	5	0 9	400	..	39·89	160	147
D	Sleights (The Hall)	P. M. Horsfall, Esq.....	5	1 0	220	..	31·18	166	134
D	Danby (The School House)	J. W. Lynas, Esq.....	5	1 0	500	..	37·82	182	170
D	Castleton	Miss M. H. Punch.....	5	1 0	425	..	35·16	221	159
D	Danby Lodge	Mr. C. Hardy	5	1 0	500	..	37·49	180	171
D	Whitby (Park Hall, Aislaby)	Rev. J. H. Richardson ...	5	1 0	500	..	29·32	214	142
D	Whitby (Mulgrave Castle)	Mr. J. Corbett	5	1 0	410	..	28·01	215	135
D	Guisborough (Lockwood Res.)	Cleveland Water Co.....	8	1 0	632	33·0	35·19	246	166
D	Saltburn (Skelton Castle)	Col. W. H. A. Wharton ...	5	0 9	272	..	29·67	237	178
	6.—TEES. 373 sq. mi.								
D	Ingleby Manor	Lord DeL'Isle & Dudley ..	5	1 0	460	..	32·02	211	147
D	Kildale Hall	Major R. B. Turton	5	1 2	600	..	36·15	216	167
D	Crathorne Hall Gardens	J. L. Dugdale, Esq.....	5	1 0	100	..	25·16	209	128
D	Barningham Park	Sir F. Milbank, Bart.	8	1 0	700	..	44·17	231	157
D	Nunthorpe (The Box)	G. D. Cochrane, Esq.....	5	1 0	287	..	26·11	217	143
D	Marton-in-Cleveland (Southcroft)	R. Theodore Wilson, Esq.	5	0 11	100	..	25·28	180	135
D	Marton-in-Cleveland (Gartheen)	G. R. Collinson, Esq. C.E..	5	1 0	160	..	23·46	178	119
D	Middlesbrough (Albert Park)	R. Sutcliffe, Esq.	5	1 0	30	23·7	23·99	185	130
d	Middlesbrough (Dorman Mus.)	The Curator	5	..	30	..	20·92	..	..
M	Baldersdale (Aygill)	G. R. Collinson, Esq., C.E.	5	1 0	1250	..	58·30	..	..
M	Baldersdale (Blackton Res.)	G. R. Collinson, Esq., C.E	5	1 0	937	..	52·60	..	..
M	Baldersdale (Balderhead)	G. R. Collinson, Esq., C.E.	5	1 0	1360	..	56·60	..	..
D	Baldersdale (Hury Reservoir)	G. R. Collinson, Esq., C.E.	5	1 0	866	..	43·00	232	180
M	Lunedale (Dow Crag)	G. R. Collinson, Esq., C.E.	5	1 0	1720	..	72·20	..	..
M	Lunedale (Lunehead)	G. R. Collinson, Esq., C.E.	5	1 0	1450	..	72·10	..	..
M	Lunedale (Selset)	G. R. Collinson, Esq., C.E.	5	1 0	924	..	51·90	..	..
D	Lunedale (Grassholme Res.)	G. R. Collinson, Esq., C.E.	5	1 0	936	..	47·51	231	180
M	Lunedale (Keekham)	G. R. Collinson, Esq., C.E.	5	1 0	1660	..	80·00	..	..
M	Lunedale (Hargill)	G. R. Collinson, Esq., C.E.	5	1 0	1320	..	69·40	..	..

DIVISION X.—NORTHERN COUNTIES.

DURHAM. (Area, 1,011 sq. mi.)

	1.—TEES & C. 396 sq. mi.								
D	Darlington (South Park)	J. Morrison, Esq.	5	1 0	150	..	29·24	255	161
D	Darlington (Broken Scar)	G. R. Collinson, Esq. C.E..	5	1 0	158	..	28·27	209	138
D	Darlington (Stanhope Road)	Rev. A. W. M. Close.....	5	1 0	180	..	29·60	194	159
D	Darlington (Hummersknott)	J. Short, Esq.	5	1 0	200	..	29·75	187	141
d	Egglesciiffe	A. B. Hutton Wilson, Esq.	8	1 2	100	..	24·90	..	..
D	Barnard Castle (Bowes Museum)	S. E. Harrison, Esq.	6	1 0	500	..	38·81	219	144
D	Barnard Castle (County School)	C. W. Watson, Esq.	5	1 6	540	29·7	39·54	201	153
D	Long Newton Reservoir	G. R. Collinson, Esq. C.E..	5	1 0	184	..	26·58	219	139
D	Stockton-on-Tees (Hartburn Lo.)	C. Nielson, Esq.	5	0 10	45	..	24·44	199	132
D	Stockton-on-Tees (Ropner Park)	W. A. Jenkins, Esq.	5	1 9	61	..	24·09	195	121
D	Stockton-on-Tees (Billingham)	S. Ammonia & Nitrates, Ld.	5	1 0	55	..	22·70	192	130
D	Middleton-in-Teesdale (Newbiggin)	R. Coggins, Esq.....	5	1 2	1000	..	55·86	241	189
D	Ferryhill (Winterton)	Medical Superintendent ..	5	1 0	360	..	27·54	190	153
D	Hurworth Burn (Crookfoot Res.)	J. R. Bradshaw, Esq.....	10	1 6	293	..	23·92	221	140
D	West Hartlepool (Waterworks)	J. R. Bradshaw, Esq.....	10	1 0	35	..	22·62	180	118
D	Hurworth Burn Reservoir	J. R. Bradshaw, Esq.....	10	1 0	357	..	23·90	217	132
D	Hartlepool (Hart Reservoir)	J. R. Bradshaw, Esq.....	10	1 0	172	..	21·06	190	123
D	Shotton (New Winning P. S.)	A.B.E.Blackburn, Esq.C.E.	8	1 0	402	..	28·20	204	142
D	Easington (Mill Hill Res.)	A.B.E.Blackburn, Esq.C.E.	8	1 0	521	..	27·33	227	139
D	Seaham (Dalton Pumping Sta.)	A.B.E.Blackburn, Esq., C.E.	8	1 0	345	..	28·03	231	143
	2.—WEAR—464 sq. mi.								
d	Stanhope (Parson Byers Qy.)	Messrs. Dorman, Long & Co., Ltd.	5	6 8	846	..	38·57	..	..
M	Burnhope (Grass Meres)	H. Robinson, Esq., C.E...	5	1 3	1850	..	67·60	..	..
M	Burnhope (Lodgegill Mine)	H. Robinson, Esq., C.E...	5	1 3	1950	..	77·45	..	..
D	Burnhope Bridge	H. Robinson, Esq., C.E...	5	1 0	1200	..	64·96	246	198
M	Cowshill (Wellheads Hush)	H. Robinson, Esq., C.E...	5	1 6	1690	..	65·95	..	..
D	Durham (Houghall Hort. Sta.)	W. S. Sharp, Esq.	5	0 11	160	..	26·22	206	140
D	Durham Observatory	F. Sargent, Esq.	8	0 10	336	24·6	23·56	210	127
D	Ushaw (St. Cuthbert's College)	Rev. J. R. Adamson.....	5	1 0	594	28·2	29·15	201	143

DIVISION X.—NORTHERN COUNTIES—(*con.*).

	STATIONS.	AUTHORITIES.	Rain-gauge Diam.	Height of Rim above Ground.	Height of Ground above Sea Level.	Average Rainfall.	1928 Rainfall.	Days with ·01 in. or more.	Days with ·04 in. or more.
	DURHAM—(*con.*).		*in.*	*ft.* *in.*	*ft.*	*in.*	*in.*		
	2.—WEAR—(*con.*).								
D	Weardale W.W. (Tunstall Res.)	H. Robinson, Esq., C.E. ..	8	1 2	724	..	35·42	228	165
M	Weardale W.W. (Waskerley 6)	H. Robinson, Esq., C.E. ..	8	4 2	1229	..	35·58	..	..
M	Weardale W.W. (Waskerley 3)	H. Robinson, Esq., C.E. ..	8	4 6	1433	..	37·13	..	..
D	Weardale W.W. (Waskerley)	H. Robinson, Esq., C.E. ..	8	0 11	1179	..	35·20	228	160
M	Weardale W.W. (Waskerley 1)	H. Robinson, Esq., C.E. ..	8	4 4	1317	..	34·38	..	..
D	Chester-le-Street (Biddick Hall 1)	Mr. J. Fletcher	5	1 0	150	..	27·10	242	135
D	Consett (Crookhall)	H. Shackleton, Esq.	5	1 0	642	..	30·91	163	142
D	Ryhope Pumping Station	A.B.E.Blackburn, Esq., C.E.	8	1 1	228	..	24·51	194	126
D	Sunderland (W. Hendon H.) No. 5	Mrs. W. A. Mounsey.....	5	1 0	130	25·6	25·55	198	132
D	Sunderland (Mowbray Pk) (+A)	Dr. A. Stuart-Hebblethwaite	5	1 0	105	..	22·22	158	117
D	Southwick Cemetery	J. Burdis, Esq.	8	1 0	171	..	24·53	164	121
	3.—TYNE, LOWER. 151 sq. mi.								
D	Weardale W. W. (Hisehope Res.)	H. Robinson, Esq. C.E....	5	1 0	1450	..	35·46	261	175
D	Weardale W.W. (Smiddy Shaw)	H. Robinson, Esq., C.E. ..	8	1 3	1128	..	37·78	242	185
D	Consett Park Farm	T. Hutton, Esq., C.E.	8	0 7	630	..	29·15	199	141
D	Rowlands Gill (Chopwellwood)	Capt. A. D. Hopkinson ...	8	1 0	446	..	32·90	229	155
D	Sunderland (Cleadon Pump.Stn.)	A.B.E.Blackburn, Esq., C.E.	8	1 0	216	..	22·70	199	117
D	Ryton-on-Tyne (Balgonie House)	A. Smith, Esq., M.D.	6	1 2	258	..	25·83	171	136
D	South Shields (Bent's Park) ...	Dr. W. Campbell Lyons...	5	1 0	36	..	24·09	213	125
D	South Shields (South Pier Wks.)	R. F. Hindmarsh, Esq., C.E.	5	1 0	17	..	23·25	198	124
	NORTHUMBERLAND. (Area, 2,015 sq. mi.)								
	1.—EDEN. 20 sq. mi.								
	2.—SOUTH TYNE. 232 sq. mi.								
d	Allenheads	J. W. Metcalfe, Esq.....	8	1 0	1350	..	56·73	..	..
	3.—TYNE, LOWER. 227 sq. mi.								
D	Corbridge (Howden Dene)	T. D. Straker-Smith, Esq. .	5	1 0	200	..	27·78	232	155
D	Newcastle (Leazes Park)	W. J. Steele, Esq.	5	1 0	255	..	26·35	174	122
D	Newcastle (Deaf & Dumb Inst.)*	The Superintendent	5	1 4	201	27·2	26·08	193	130
D	Newcastle (Wellburn, Jesmond)	J. H. Holmes, Esq., C.E. ..	5	1 0	163	..	25·99	179	122
d	Hexham (Beaufront Castle) ...	The Lady Rayleigh.....	8	1 0	450	..	27·13	..	..
d	Wallsend (Carville School)	G. R. Pattison, Esq.	5	1 3	100	..	28·90	..	..
D	Tynemouth (Tyne Pier Works)	R. F. Hindmarsh, Esq., C.E.	5	1 0	65	..	21·58	190	119
D	Tynemouth (C.G. Sta.) *New g.*	The Meteorological Office..	8	1 0	67	..	25·17	209	136
D	Whittle Dene Filters (N'stle W.W.)	A. Hardcastle, Esq., C.E...	5	1 1	353	27·5	26·99	219	147
D	Whittle Dene Res. (Newc. W.W.)	A. Hardcastle, Esq., C.E...	5	0 6	380	26·1	27·07	221	138
	4.—NORTH TYNE. 433 sq. mi.								
	Ryal Cottage (Newcastle W.W.)	A. Hardcastle, Esq., C.E...	10	0 9	463	29·2	27·78	..	..
	Hallington Vill. (N'castle W.W.)	A. Hardcastle, Esq., C.E...	5	1 0	467	30·3	30·60	..	..
D	Hallington Res. (N'castle W.W.)	A. Hardcastle, Esq., C.E...	5	1 0	470	28·6	30·97	220	172
	Hallington (Fawcett) (Newc. W.W)	A. Hardcastle, Esq., C.E...	5	1 2	537	28·2	30·17	..	..
	Hallington (Cheviott) (Newc. W.W)	A. Hardcastle, Esq., C.E..	5	1 2	576	27·8	29·61	..	..
	Camphill (Newcastle W.W.) ...	A. Hardcastle, Esq., C.E...	5	1 0	650	30·0	32·11	..	..
D	Colt Crag Res., (N'castle W.W.)	A. Hardcastle, Esq., C.E...	5	1 0	654	28·2	32·72	217	176
	Green Crag (Newcastle W.W.)	A. Hardcastle, Esq., C.E...	5	1 0	900	30·8	35·12	..	..
D	Falstone Rectory	Rev. A. J. Dexter	5	1 0	485	..	49·08	239	185
D	Bellingham (High Green Man.)	Capt. Sir C. Morrison-Bell, Bt.	5	1 0	849	..	38·94	241	180
D	Redewater (Catcleugh)	A. Hardcastle, Esq., C.E...	5	1 0	819	40·5	52·63	255	194
	5.—OOQUET & C. 840 sq. mi.								
	Whittington (Newcastle W.W.)	A. Hardcastle, Esq., C.E...	8	0 9	528	28·1	28·04	..	..
	Burnside (Newcastle W.W.) ...	A. Hardcastle, Esq., C.E...	5	0 9	419	27·3	27·22	..	..
D	Morpeth (Ashington)	J. Gray, Esq.	5	8 0	110	..	24·69	193	136

* Formerly called Town Moor.

DIVISION X.—NORTHERN COUNTIES—(*con.*).

	STATIONS.	AUTHORITIES.	Rain-gauge Diam.	Height of Rim above Ground.	Height of Ground above Sea Level.	Average Rainfall.	1928 Rainfall.	Days with ·01 in. or more.	Days with ·04 in. or more.
	NORTHUMBERLAND—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
	5.—COQUET & C.—(*con.*).								
D	Morpeth (Cockle Park)	Northumberland Co. Council	8	1 0	325	28·7	26·74	212	143
D	Font Res. (Tynemouth W. W.)	J. W. McKerrow, Esq.	10	1 2	620	..	31·59	253	169
	Long Horsley (Ghyllheugh)	S. J. Redpath, Esq.	5	1 0	250	..	31·48	..	..
d	Rothbury (Brinkburn Priory)	Mrs. Hugh Fenwick	9	1 0	257	..	29·16	..	..
	Long Framlington (Embleton H.)	J. C. Fenwick, Esq.	5	0 9	430	..	30·40	..	..
d	Acklington (Broomhill Colliery)	A. M. Morison, Esq.	5	1 0	92	..	25·29	..	..
D	Alnmouth (Nether Grange)	Miss E. Pease, J.P., O.B.E.	5	1 6	40	..	26·46	204	138
D	Howick Hall Gardens	Mr. J. Wright	8	0 10	121	28·2	31·46	205	146
	6.—TWEED. 262 sq. mi.								
D	Glanton Pyke Gardens	Col. C. G. Collingwood, C.B.	8	4 2	521	..	32·92	222	172
D	Wooperton	Mrs. Burdon	5	1 0	..	..	35·91	195	151
D	Ilderton (Lilburn Tower)	Mr. W. Lovett	10	6 0	300	27·9	31·65	210	147
D	Ilderton (Lilburn Tower Gdns.)	Mr. W. Lovett	5	1 0	250	30·4	35·08	219	158
d	Wooler (Victoria House)	Miss E. M. Dodds	5	1 0	176	..	30·59	..	..
	Mindrum (Thornington House)	Leonard Briggs, Esq.	5	..	..	..	28·84	..	..
D	Berwick-on-Tweed (Ramparts)	S. Hill, Esq.	5	1 0	76	..	23·24	186	128
	7.—INSULAR. 1 sq. mi.								
	CUMBERLAND. (Area, 1,516 sq. mi.)								
	1.—EDEN & SOLWAY. 887 sq. mi.								
D	Ullswater (Hallsteads)	Mrs. F. Thomasson	5	1 0	497	..	78·73	213	188
D	Watermillock (Mell Fell House)	Mrs. Spring-Rice	5	1 6	970	..	71·03	210	177
D	Penrith (Hutton John)	F. Hudleston, Esq., C.E.	5	1 0	688	..	64·12	238	182
D	Penrith (Briar Cottage)	H. Lester, Esq.	5	1 0	575	32·8	44·21	207	171
D	Penrith (Laurel Bank)	A. B. Sinclair, Esq.	5	0 8	500	..	47·32	219	171
D	Penrith (Newton Rigg)	Cumberland County Council	8	1 0	560	36·4	46·58	241	175
D	Uldale (Chapel House Res.)	J. Strong, Esq.	8	1 0	620	..	57·66	237	197
D	Penrith (Nunwick Hall)	R. Heywood Thompson, Esq.	5	1 0	268	..	44·55	218	169
D	Penrith (Ennim)	Lt.Col. H. L. Riley, DSO, OBE	5	1 0	660	..	54·55	205	169
D	Mealsgate (Quarry Hill)	J. R. Watters, Esq.	8	1 0	479	..	53·52	236	187
	Allonby	W. H. Williamson, Esq. J.P.	5	0 10	25	..	50·38	..	..
D	Renwick (Ravenwood)	W. Salkeld, Esq.	5	4 0	750	..	52·34	239	209
D	Ainstable (Heather Glen)	A. Guthrie-Smith, Esq.	5	1 8	500	..	43·12	237	175
D	Wigton (Brookfield)	David W. Reed, Esq.	5	1 0	124	..	44·15	211	184
D	Wreay Vicarage	Rev. Canon A. R. Hall	5	1 0	310	31·8	38·24	235	176
D	Geltsdale	P. Dalton, Esq.	5	1 2	778	..	49·90	254	187
D	Carlisle (Spital Cemetery)	J. T. Charlton, Esq.	9	1 1	114	31·8	37·17	221	170
	Carlisle (Denton Holme)	W. Eggleston, Esq.	5	1 0	57	..	36·10	..	..
d	Carlisle (Scaleby Hall)	Lady Allison	5	1 0	111	33·7	43·58	..	167
	2.—DERWENT. 257 sq. mi.								
M	Borrowdale (Seathwaite)	The Meteorological Office.	4	0 9	422	129·5	182·15	..	..
	Borrowdale (Seathwaite) garden	The Meteorological Office.	5	1 6	423	..	(176·58)	..	..
M	Ullscarf	L. Holme Lewis, Esq., C.E.	5	1 0	2100	115·1	167·10	..	..
‡	Helvellyn (Birkside)	L. Holme Lewis, Esq., C.E.	5	1 0	1900	80·4	112·80	..	..
M	Wythburn	L. Holme Lewis, Esq., C.E.	5	1 0	610	87·8	146·10	..	..
D	Rosthwaite (The Moraine)	G. Scott, Esq.	5	1 0	950	..	139·64	245	214
‡	Armboth Fells (The Pewitts)	L. Holme Lewis, Esq., C.E.	5	1 0	1650	82·9	122·90	..	..
‡	Helvellyn (Whiteside)	L. Holme Lewis, Esq., C.E.	5	1 0	2100	75·9	119·20	..	..
D	Buttermere (Hassness)	E. Dixon, Esq.	6	1 0	350	..	144·30	238	215
M	Crummock Water (Llanthwaite Grn.)	R. W. Hall, Esq.	5	1 0	510	..	87·28	..	..
	Thirlmere (Dale Head Hall)	L. Holme Lewis, Esq., C.E.	6	1 3	620	78·7	118·90	..	..
D	Keswick (Lingholm Gardens)	J. Elson, Esq.	5	1 0	300	..	90·91	225	194
D	Keswick (Derwent Island) *old g.*	C. E. Marshall, Esq.*	5	0 9	280	..	86·27	228	195

* *Per* Miss Cordelia Marshall. ‡ Gauge over-exposed on Moor.

DIVISION X.—NORTHERN COUNTIES—(*con.*).

	STATIONS.	AUTHORITIES.	Rain-gauge Diam.	Height of Rim above Ground.	Height of Ground above Sea Level.	Average Rainfall.	1928 Rainfall.	1928 Days with ·01 in. or more.	1928 Days with ·04 in. or more.
	CUMBERLAND—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
	2.—DERWENT—(*con.*).								
D	Keswick (Derwent Island) *new g.*	C. E. Marshall, Esq.*	5	0 9	290	57·0	80·34	227	189
D	Keswick (High Hill)	T. Wilson, Esq.	5	1 0	254	..	74·94	231	178
D	Portinscale (High Moss)	Mrs. J. E. Brown	5	1 0	285	..	85·85	237	190
D	Keswick (Mirehouse)	Miss Spedding	5	1 6	280	..	65·59	235	188
D	Workington (Stainburn Res.)	The Borough Surveyor....	5	1 0	180	..	52·04	194	153
d	Threlkeld (Blencathra Sanat.)	Dr. W. Goodchild	5	1 0	885	..	81·73	(214)	(195)
M	Cockermouth (Castlegate Drive)	R. W. Hall, Esq.	5	0 8	208	..	56·24	..	..
	Camerton Vicarage	Rev. E. C. Bennett	5	1 0	200	..	49·73	..	..
D	Bassenthwaite (Higham)	G. F. Fisher, Esq.	5	0 9	500	..	58·84	219	193
	3.—WEST COAST STREAMS. 235 sq. mi.								
D	Ravenglass (The Grove)	Walter Marchant, Esq. ...	5	1 0	70	42·5	58·51	214	175
D	Eskdale Green (Gatehouse)	Mr. J. W. Rainbow	5	1 0	300	..	77·52	238	185
	Braystones	H. H. Watson, Esq.....	10	3 6	36	..	54·21	..	..
M	Egremont (Lank Rigg)	J. Sherwen, Esq.	5	1 0	1750	..	104·00	..	..
D	St. Bees (Bickerley House)	Lt.-Col. G. Dixon	5	1 0	60	..	60·44	(212)	(180)
D	Whitehaven (Stanley Pond)	WhitehavenCollieryCo.,Ltd.	12	2 11	45	..	67·68	203	173
D	Whitehaven (Scragill Reservoir)	C. A. Wilson, Esq., C.E. ..	8	1 0	188	..	64·14	222	188
D	Workington (Winscales House)	Miss E. W. Trench.....	5	1 6	440	..	49·18	219	165
	4.—DUDDON & C. 50 sq. mi.								
	5.—SOUTH TYNE. 87 sq. mi.								
	WESTMORLAND. (Area, 783 sq. mi.)								
	1.—EDEN. 373 sq. mi.								
D	Kirkby Stephen (Redman Ho.)	late Mrs. T. Mason	5	1 0	574	42·3	60·53	229	183
	Wasdale Pike	L. Holme Lewis, Esq., C.E.	5	1 0	1825	..	105·18	..	..
	Mosedale (Mosedale Cottage)	L. Holme Lewis, Esq., C.E.	5	1 0	1443	..	120·01	..	..
	Wet Sleddale (Mirethwaite)	L. Holme Lewis, Esq., C.E.	5	1 0	990	..	97·86	..	..
	Blea Water	L. Holme Lewis, Esq., C.E.	5	1 0	1465	..	144·70	..	..
	Mardale (Grove Brae)	L. Holme Lewis, Esq., C.E.	5	1 0	802	..	128·46	..	..
	Shap (Birkbeck Fell)	L. Holme Lewis, Esq.. C.E.	5	1 0	935	..	87·01	..	..
	Swindale Parsonage	L. Holme Lewis, Esq., C.E.	5	1 0	875	..	103·34	..	..
	Swindale Head	L. Holme Lewis, Esq., C.E.	5	1 0	1025	..	98·21	..	..
	Grizedale (Ruthwaite Lodge)	Late W. H. Marshall, Esq.*	8	1 6	1250	..	129·86	..	..
	Mardale (Low Raise)	L. Holme Lewis, Esq., C.E.	5	1 0	2465	..	142·09	..	..
	Shap (Thornship Gill)	L. Holme Lewis, Esq., C.E.	5	1 0	865	..	86·11	..	..
	Shap (Tailbert Head)	L. Holme Lewis, Esq., C.E.	5	1 0	1100	..	83·32	..	..
D	Stainmore (Rampson) *old gauge*	Capt. T. W. Bracken.....	5	1 9	981	..	48·78	253	198
d	Stainmore (Rampson) *new gauge.*	Capt. T. W. Bracken.....	5	1 0	980	..	(51·39)	(249)	(200)
	Hawes Water (Boulderstone Nib)	L. Holme Lewis, Esq., C.E.	8	1 0	744	..	103·92	..	..
	Hawes Water (Naddle House)	L. Holme Lewis, Esq., C.E.	5	1 0	825	..	93·26	..	..
	Hawes Water (Measand)	L. Holme Lewis, Esq., C.E.	5	1 0	824	..	93·68	..	..
	Measand Beck (Keasgill)	L. Holme Lewis, Esq., C.E.	5	1 0	1862	..	77·56	..	..
	Patterdale Hall	Late W. H. Marshall, Esq.*	5	1 3	490	86·4	123·80	239	..
d	Patterdale (Greenside Mine)	Matthew Place, Esq.	7	1 6	1000	..	124·03	(235)	(221)
	Bampton (Low Kop)	L. Holme Lewis, Esq., C.E.	5	1 0	1876	..	77·35	..	..
	Bampton (Walmhow)	L. Holme Lewis, Esq., C.E.	5	1 0	615	..	69·52	..	..
	Bampton (Stanegarth)	L. Holme Lewis, Esq., C.E.	5	1 0	913	..	89·36	..	..
	Cawdale Beck (Howe Grain)	L. Holme Lewis, Esq., C.E.	5	1 0	1642	..	70·62	..	..
	Heltondale (Kidmoor)	L. Holme Lewis, Esq., C.E.	5	1 0	984	..	71·52	..	..

* *Per* Miss Cordelia Marshall.

DIVISION X.—NORTHERN COUNTIES—(*con.*).

STATIONS.	AUTHORITIES.	Rain-gauge Diam.	Height of Rim above Ground.	Height of Ground above Sea Level.	Average Rainfall.	1928 Rainfall.	Days with .01 in. or more.	Days with .04 in. or more.
WESTMORLAND—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
1.—EDEN—(*con.*).								
D Appleby (Castle Bank)	Lady Holmes	5	1 0	440	35·0	51·91	241	192
Ullswater (Sharrow Bay)	Mr. G. Robinson	5	1 0	600	..	72·89	..	..
D Penrith (Morland)	F. R. Markham, Esq.	5	1 0	455	..	49·58	212	169
D Penrith (Lowther Castle)	Mr. J. Jeffrey	5	1 0	760	..	57·20	216	172
Morland Hall	W. G. Shorrock, Esq.	5	1 0	475	..	44·87	..	..
D Penrith (Barton House)	Mrs. Legh Tolson	5	0 10	500	..	62·93	235	181
D Temple Sowerby (The Grange)	Col. E. B. Burton	5	1 1	370	..	43·75	205	163
D Penrith (Brougham Gardens)	Mr. J. H. Lane	5	4 6	470	..	46·89	212	166
2.—LEVEN. 60 sq. mi.								
d Bowness (Dawstone)	W. H. Milne, Esq.	5	1 2	550	63·1	98·38	..	172
D Windermere (Hammar Bank)	Mrs. H. Coutts	5	1 0	200	..	97·78	240	198
D Windermere (Holehird)	H. L. Groves, Esq.	5	1 0	483	72·7	104·40	263	207
D Windermere (Brockhole)	W. Gaddum, Esq.	5	1 6	175	..	98·24	235	203
D Ambleside (Wansfell)	Miss Wrigley	8	1 0	150	..	108·53	231	199
M Little Langdale (Fell Foot)	Miss C. Marshall	5	2 2	380	..	153·43	..	..
D Ambleside (White Craggs)	C. H. Hough, Esq.	5	1 7	200	..	112·08	222	203
D Ambleside (Market Square)	G. A. Johnston, Esq., M.D.	5	1 0	180	..	116·59	244	212
Elterwater (Eltermere)	Miss C. Marshall	5	1 0	205	..	132·77	229	..
D Rydal (The Stepping Stones)	Gordon Wordsworth, Esq.	5	1 3	190	85·0	123·34	245	212
d Rydal	Miss M. Yates	5	1 0	380	..	(124·93)	(247)	(210)
D Rydal (High Close)	F. E. T. Jones Balme, Esq.	8	0 9	553	83·3	126·35	230	205
D Rydal (The Hall)	R. E. Porter, Esq.	5	1 0	354	..	125·12	253	208
D Grasmere (The Wray)	Miss G. M. Simpson	5	1 0	221	88·5	136·75	251	216
3.—KENT. 188 sq. mi.								
D Burton (Under Fell)	J. B. Hoyle, Esq.	5	0 9	225	..	63·26	218	176
D Heversham (Plumtree Hall)	Miss M. C. Watson	5	1 0	115	..	70·16	233	177
D Grange-over-Sands (Witherslack)	R. M. Argles, Esq.	5	0 9	75	..	73·96	214	180
D Killington Reservoir	F. G. T. Adams, Esq.	8	2 8	674	..	72·18	203	184
D Kendal (Vicarage Terrace)	G. F. Braithwaite, Esq.	8	0 8	150	..	78·50	226	195
D Kendal (Highgate)	R. Rhodes, Esq.	5	1 3	150	..	82·54	230	184
d Kendal (Greenside)	Miss C. E. Wilson	5	1 0	380	..	(85·77)	(223)	(186)
D Kendal (Ellergreen)	J. W. Cropper, Esq.	5	1 6	270	..	86·88	222	188
D Kendal (Burneside)	W. E. Brown, Esq.	5	0 10	160	..	83·94	217	189
d Kendal (Potter Fell)	J. Cropper & Co., Ltd.	5	2 0	750	..	124·33	..	..
w Windermere (Dubbs Reservoir)	J. Lupton, Esq.	5	2 0	900	..	96·84	..	..
4.—LUNE. 122 sq. mi.								
Kirkby Lonsdale	J. R. Picard, Esq.	7	1 0	215	..	68·34	..	..
D Barbon Manor	Lord Shuttleworth	5	1 3	650	..	68·91	201	194
D Barbon (The Stores)	W. Wilkinson, Esq.	5	1 0	310	..	69·23	193	173
Ravenstonedale (Railway Station)	J. T. Sanderson, Esq.	5	1 0	800	..	74·61	..	..
5.—TEES. 40 sq. mi.								
M Lunedale (Conny Pot)	G. R. Collinson, Esq., C.E.	5	1 0	1840	..	66·90	..	..

DIVISION XI.—MONMOUTH, WALES, AND THE ISLANDS.

MONMOUTH. (Area, 534 sq. mi.)

1.—RHYMNEY. 39 sq. mi.								
d Rumney (Witla Court)	Mr. E. Edwards	5	1 0	175	39·4	44·75	..	..
D St. Mellons (Druidstone)	Mr. G. H. Shoebridge	5	1 0	280	..	47·14	203	160
d Machen (Machen Quarry)	Machen Stone and Lime Co.	5	1 1	250	..	55·85	203	185

DIVISION XI.—MONMOUTH, WALES, AND THE ISLANDS—(*con.*).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge Height of Rim above Ground.	Height of Ground above Sea Level.	Average Rainfall.	1928 Rainfall.	Days with ·01 in. or more.	Days with ·04 in. or more.
MONMOUTH—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
2.—EBBW. 88 sq. mi.								
D Rogerstone (Rhiwderin)	Sir L. Forestier-Walker, K.B.E.	5	1 3	250	44.0	56·72	204	172
D Blackwood	D. H. Price, Esq.	5	0 10	630	..	57·17	209	165
D Abertillery (The Park)	S. E. Thomas, Esq.	5	1 0	700	57·2	64·18	226	180
D Tredegar Laboratory	W. Morgan, Esq.	5	2 0	950	59·8	65·09	221	181
D Tredegar (Redesdale)	D. W. Davies, Esq.	5	1 6	963	47·1	59·58	225	184
D Ebbw Vale (Iron Works)	J. H. Williams, Esq., V.C.	8	1 0	902	56·6	63·26	198	171
D Nant-y-bwch (Shon Sheffrey's W)	D. W. Davies, Esq.	5	1 5	1204	..	75·43	238	192
3.—USK & C. 290 sq. mi.								
D Redwick	Lt.-Col. Blethyn T. Rees, C.E.	5	1 3	24	..	38·48	194	156
D Portskewett (Sudbrook)	A. S. Quartermaine, Esq., C.E.	8	1 0	51	..	35·48	163	133
D Newport (Allt-yr-yn Hosp.)	Dr. J. Howard Jones, M.O.H	8	1 0	265	..	52·78	208	174
D Newport W.W. (Friar St. Yard)	Newport Corporation	5	6 0	32	..	48·82	204	170
D Newport WW (Ynis-y-fro Res.)	Newport Corporation	5	1 0	136	..	53·89	231	177
D Newport WW (Pant-y-reos Res.)	Newport Corporation	5	1 0	435	..	54·59	226	174
D Newport W.W. (Llanvaches)	Newport Corporation	5	0 10	456	..	46·41	205	155
D Newport W.W. (Nantypridd)	Newport Corporation	5	1 0	500	..	51·70	206	163
D Chepstow (Itton Court)	Sir E. Curre, Bart., C.B.E.	5	1 0	390	..	47·69	194	164
D Caerleon (Cwm-y-wiwer)	Lt.-Col. Blethyn T. Rees, C.E.	5	1 0	112	37·5	45·76	223	161
D Newport W.W. (Newchurch)	Newport Corporation	5	1 0	550	..	54·04	207	163
D Usk (Castle Parade House)	J. Maitland Watkins, Esq.	5	1 0	75	..	42·69	173	156
D Usk (Monmouth Agric. Instn.)	G. H. Purvis, Esq.	5	1 0	70	..	43·00	213	153
D Abersychan (Glansychan)	G. W. James, Esq.	5	1 2	699	55·0	64·44	244	184
D Goytre (Goytre Hall)	Mrs. Lionel Whitehead	5	1 2	300	46·1	53·36	210	171
D Blaenavon (Estate Office)	E. J. John, Esq.	8	1 0	1150	55·1	65·23	184	160
D Abergavenny (Ty Clyd)	F. D. Llewelyn, Esq.	5	1 0	272	45·1	48·83	205	161
D Abergavenny (Mansel Place)	C. Webb, Esq.	8	1 0	217	40·6	43·09	184	140
D Abergavenny (Larchfield)	Dr. N. R. Phillips	5	1 0	240	37·5	38·77	195	143
D Abergavenny (The Chain)	W. Baker-Gabb, Esq.	5	1 0	310	..	40·73	215	154
D Grwyne Fawr (Coed Dias)	W. Baker-Gabb, Esq.	5	1 0	900	..	51·73	230	173
4.—WYE. 117 sq. mi.								
D Llanvihangel Crucorney Depot	J. F. Jupp, Esq., C.E.	5	1 0	501	..	45·65	207	176
GLAMORGAN. (Area, 808 sq. mi.)								
1.—LOUGHOR. 55 sq. mi.								
D Gorseinon (Penllergaer)	Sir C. Venables Llewelyn, Bt.	5	3 0	240	48·7	60·10	222	182
D Felindre (Blaenant Dhu)	Lt.-Col. F. Hibbert, C.E.	5	1 3	346	..	76·22	232	184
D Felindre (Lower Lliw Res.)	Lt.-Col. F. Hibbert, C.E.	8	1 3	426	..	67·45	230	176
D Felindre (Upper Lliw Res.)	Lt.-Col. F. Hibbert, C.E.	8	1 3	599	..	84·13	228	195
2.—GOWER PENINSULA. 62 sq. mi.								
D Gower (Penrice Castle)	Mr. George Miller	5	1 11	12	..	53·09	188	165
d Penmaen (Cefn Mor)	Mrs. R. A. Bostock	5	1 6	300	41·5	49·11	..	169
D Sketty (Rhydyrhelyg)	E. H. Perkins, Esq.	5	1 0	124	46·0	62·01	229	174
3.—TAWE. 47 sq. mi.								
D Swansea (Victoria Park) (+A)	D. Bliss, Esq.	8	1 0	27	44·7	61·31	237	190
D Morriston (Pentrepoth House)	Dr. M. W. Williams	5	1 0	236	..	58·90	201	153
D Clydach (Wernfadog) (R)	W. J. P. Player, Esq.	8	1 0	..	..	61·90	217	182
D Ystalyfera (Wern House)	Miss J. E. Williams	5	1 6	240	64·8	94·90	199	186

DIVISION XI.—MONMOUTH, WALES, AND THE ISLANDS—(*con.*).

STATIONS.	AUTHORITIES.	Rain-gauge Diam.	Height of Rim above Ground.	Height of Ground above Sea Level.	Average Rainfall.	1928 Rainfall.	Days with .01 in. or more.	Days with .04 in. or more.
GLAMORGAN—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
4.—NEATH. 82 sq. mi.								
D Briton Ferry (Brynsiriol)	H. A. Clarke, Esq., C.E.	5	1 0	33	..	60·95	199	169
D Briton Ferry (Cefn Court)	H. A. Clarke, Esq., C.E.	5	1 0	503	47·7	61·15	189	174
D Neath (Cimla Reservoir)	H. A. Clarke, Esq., C.E.	5	1 0	360	..	59·47	204	177
D Neath (Gnoll Reservoir)	H. A. Clarke, Esq., C.E.	5	1 0	204	..	64·19	205	178
D Neath (Bryn-Teg)	H. P. Lloyd, Esq.	5	0 9	100	..	64·64	221	180
D Neath (Glynfelin)	T. Gibbins, Esq.	5	1 4	180	..	68·92	180	175
D Rhondda W.W.(Llyn FawrRes.)	Mr. J. B. Hughes	8	1 0	1220	88·6	104·75	231	188
Pontardawe (Plas Cilybebyll)	J. H. P. Lloyd, Esq.	5	1 3	500	..	83·53	..	..
5.—OGMORE & C. 350 sq. mi.								
D Barry W.W. (Biglis)	T. E. Franklin, Esq., C.E.	5	1 0	19	34·5	42·07	201	162
W Barry W.W.(Merthyr Dyfan R.)	T. E. Franklin, Esq., C.E.	5	1 0	300	37·6	44·48	..	..
W Barry W. W. (Dinas Powis Res.)	T. E. Franklin, Esq., C.E.	5	1 0	165	36·4	42·66	..	..
D Lower Penarth	E. I. Evans, Esq., C.E.	5	1 0	66	34·9	36·87	177	144
D Penarth (Council Offices)	E. I. Evans, Esq., C.E.	5	5 0	160	37·1	39·52	188	151
D Cardiff (Cogan Pumping Statn.)	N. J. Peters, Esq., C.E.	5	1 0	121	37·7	44·95	203	154
D Cardiff (Ely Pumping Station)	N. J. Peters, Esq., C.E.	5	1 0	53	42·1	48·31	239	174
D Fairwater (Glan Ely Hospital)	Medical Superintendent	8	1 0	122	..	(47·40)	184	157
D Cardiff (St. Fagans Castle)	Capt. H. A. Pettigrew	5	0 10	100	48·5	58·94	209	182
D Merthyr Mawr	Lt.-Col. J. I. D. Nicholl	5	1 6	75	42·9	49·12	258	195
D Bridgend	H. J. Randall, Esq.	8	1 3	50	..	50·95	206	173
d Bridgend (Heol-y-Cyw Sch.)	W. Morgan-Richards, Esq.	5	1 0	230	..	59·53	..	..
D Port Talbot (Twyn-yr-hydd)	E. N. David, Esq.	5	1 3	180	42·6	52·57	205	158
D Port Talbot (Groeswen Ganol)	A. Bishop, Esq.	8	1 0	51	40·3	51·72	183	162
D Maesteg (Neath Road)	Llewelyn C. Lloyd, Esq.	8	0 10	700	..	79·89	204	199
D Pontycymmer (Police Station)	Sergeant F. Johns	8	1 0	560	..	103·32	198	175
D Glyncorrwg Colliery	Mr. J. Preece	5	4 6	725	85·4	108·73	226	210
6.—TAFF. 157 sq. mi.								
D Cardiff (Trade Street Depot)	N. J. Peters, Esq., C.E.	5	7 0	45	39·5	48·13	205	157
D Llandaff (West Hill)	J. E. Gladstone, Esq.	5	1 0	110	42·2	52·02	230	176
D Rhubina Reservoir	N. J. Peters, Esq., C.E.	5	1 0	336	48·1	58·75	224	175
D Pontypridd (Lan Wood Res.)	H. E. Maltby, Esq., C.E.	5	1 6	300	55·1	67·66	212	176
D Ystradyfodwg (Tyntyla Hos.)	J. D. Jenkins, Esq., M.D.	5	1 0	590	60·1	72·01	223	184
D Treharris Service Reservoir	A. J. Marshall, Esq., C.E.	5	1 3	765	52·3	67·87	204	182
D Mountain Ash (Darranlas Res.)	W. G. Thomas, Esq., C.E.	5	0 11	540	63·6	75·30	219	185
D Treherbert (Tyn-y-waun)	O. Thomas, Esq.	5	1 0	801	87·0	120·87	234	194
D Rhondda (Pont Lluest WenR) 3	H. E. Maltby, Esq., C.E.	5	1 6	1100	82·1	102·40	213	193
D Rhondda (Pont Lluest WenR.)2	H. E. Maltby, Esq., C.E.	5	1 6	1200	63·3	105·80	213	195
D Rhondda (Pont Lluest Wen R.)1	H. E. Maltby, Esq., C.E.	5	1 6	1280	89·0	126·04	213	196
D Merthyr Tydfil(Penybryn Filters)	A. J. Marshall, Esq., C.E.	5	1 3	937	54·0	67·90	250	200
D Dowlais (Gwernllwyn)	R. C. Harrison, Esq.	5	1 6	1071	51·4	66·01	218	188
D Dowlais (Garth Filter Beds)	A. C. Quiningborough, Esq.	5	1 0	1245	..	71·37	253	194
7.—RHYMNEY. 55 sq. mi.								
D Cardiff (Roath Park)	A. A. Pettigrew, Esq.	5	0 11	49	41·6	47·03	221	167
D Cardiff (Penylan)	R. M. F. Picken, Esq., M.D.	5	1 0	203	41·4	47·50	210	163
D Cardiff (Heath Filters)	N. J. Peters, Esq., C.E.	5	1 0	132	41·3	49·16	206	165
D Llanishen Reservoir	N. J. Peters, Esq., C.E.	5	1 0	155	39·4	45·42	205	163
D Lisvane Reservoir	N. J. Peters, Esq., C.E.	5	1 0	150	37·4	40·27	203	165
D Rhymney Bridge Reservoir	E. Watkin Edwards, Esq., C.E.	8	0 6	1150	56·8	75·28	235	207
CARMARTHEN. (Area, 918 sq. mi.)								
1.—TEIFI. 87 sq. mi.								
2.—TOWY & C. 715 sq. mi.								
D Carmarthen (The Friary)	Dr. L. M. Bowen-Jones	5	1 5	62	48·3	62·65	223	188
D Carmarthen (Model&Prac. Sch.)	C. W. Wilford, Esq.	5	1 5	65	..	66·14	232	190

DIVISION XI.—MONMOUTH, WALES, AND THE ISLANDS—(*con.*).

STATIONS.	AUTHORITIES.	Rain-gauge: Diam.	Height of Rim above Ground.	Height of Ground above Sea Level.	Average Rainfall.	1928: Rainfall.	Days with ·01 in. or more.	Days with ·04 in. or more.
CARMARTHEN—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
2.—TOWY & C.—(*con.*)								
D Llandilo (Dynevor Castle)	Lord Dynevor	8	1 0	202	53·2	64·70	243	198
D Llandilo (Bryneithen)	F. L. Puxley, Esq.	5	1 0	400	49·8	65·36	224	191
w Llyn-y-fanFach(WaenSychlwch)	R. C. Jones, Esq.	5	1 0	1647	83·2	149·70	..	..
d Llyn-y-fan Fach (Nant Coch)	R. C. Jones, Esq.	5	1 0	1172	74·5	104·69	..	..
w Llyn-y-fan Fach (Bua'r Llyn)	R. C. Jones, Esq.	5	1 0	1650	..	155·75	..	..
D Llyn-y-fan Fach(Troed-y-Foel)	R. C. Jones, Esq.	5	1 0	867	..	87·12	228	190
D Llanddeusant (Pontcrynfe)	J. Thomas, Esq.	5	1 0	323	55·6	74·25	207	172
D Abergorlech	S. L. Davies, Esq.	5	1 0	250	..	73·40	226	192
D Llandovery (Nantyrhogfaen)	D. T. M. Jones, Esq.	5	1 0	249	50·8	64·03	210	177
D Llanwrda (Dolaucothy)	Mr. H. H. Matthews	5	2 6	498	57·5	73·22	248	203
3.—LOUGHOR & C. 104 sq. mi.								
D Llanelly (Old Market Yard)	G. Watkeys, Esq., C.E.	5	12 0	35	44·6	60·82	229	185
D Llanelly (Filter Beds)	G. Watkeys, Esq., C.E.	5	1 0	237	45·1	64·81	217	178
D Llanelly (Cwmlliedi W.W.)	G. Watkeys, Esq., C.E.	5	2 3	240	48·7	66·84	234	189
D Llanelly (Upper Lliedi Res.)	G. Watkeys, Esq., C.E.	5	3 0	290	58·6	74·52	231	201
w Llannon	R. C. Jones, Esq.	5	1 0	860	..	77·80	..	..
4. TAWE. 7 sq. mi.								
5.—USK. 5 sq. mi.								
6.—WYE.								
PEMBROKE. (Area, 617 sq. mi.)								
1.—TEIFI. 37 sq. mi.								
2.—NEVERN & C. 91 sq. mi.								
3.—WEST COAST STREAMS. 82 sq. mi.								
4.—CLEDDAU & C. 407 sq. mi.								
d Pembroke (Stackpole Court)	Mr. F. G. Garlick	6	1 6	60	39·3	49·51	..	146
D Manorbier (N.P. School)	H. J. Parr, Esq.	5	12 0	120	..	45·54	234	185
D Tenby (The Priory)	G. P. Webb, Esq.	8	0 10	87	40·9	51·65	214	165
D St. Ann's Head	The Meteorological Office	8	1 0	142	35·3	47·10	208	169
d Pembroke Dock (County School)	J. H. Garnett, Esq.	5	1 0	85	42·7	52·16	..	..
D Pembroke Dock (Admiralty R.)	Officer i/c. Works	8	1 0	90	..	51·67	204	167
d Milford Haven W. W.	S. Hall, Esq.	5	1 0	79	..	(46·84)	..	..
D Saundersfoot (Hean Castle)	Lord Merthyr	5	1 1	206	36·3	51·68	193	178
Haverfordwest (Picton Castle)	Sir C. E. G. Philipps, Bt.	5	0 10	138	46·8	61·12	..	..
D Haverfordwest (Portfield)	J. W. Phillips, Esq.	5	1 0	250	44·8	57·24	224	179
D Haverfordwest (Grammar Sch.)	J. W. Phillips, Esq.	5	1 0	95	46·4	60·44	220	182
D Fishguard (Langton, Dwrbach)	J. C. Yorke, Esq.	5	1 11	320	45·4	48·42	241	176
CARDIGAN. (Area, 688 sq. mi.)								
1.—DOVEY. 20 sq. mi.								
d Glandyfi	R. A. C. Pugh, Esq.	..	.. ..	..	..	56·50	..	157
2.—YSTWYTH & C. 347 sq. mi.								
D Llanafan (Crosswood Park)	The Earl of Lisburne	5	1 0	201	..	60·07	251	195
D Yspytty-Ystwyth (Hafod)	T. J. Waddingham, Esq.	5	1 3	580	56·4	73·08	264	209
Capel Bangor (Penllwyn)	W. E. Whitehouse, Esq.	5	1 0	145	41·3	47·74	..	..

DIVISION XI.—MONMOUTH, WALES, AND THE ISLANDS—(*con.*).

STATIONS.	AUTHORITIES.	Rain-gauge: Diam.	Height of Rim above Ground.	Height of Ground above Sea Level.	Average Rainfall.	1928: Rainfall.	Days with ·01 in. or more.	Days with ·04 in. or more.
CARDIGAN—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
2.—YSTWYTH & C.—(*con.*).								
D Aberystwyth (Castle Grounds)	Dr. A. Thomas	8	1 0	69	..	37·06?	221	170
D Aberystwyth (North Parade)	Dr. A. Thomas	8	2 6	16	..	44·78	227	177
D Aberystwyth (Plant Breeding Stn.)	M. G. Jones, Esq.	5	1 0	450	..	51·21	251	173
D Elerch (Lletty-evan-hen)	M. G. Jones, Esq.	5	1 0	900	..	53·18	216	178
3.—TEIFI. 260 sq. mi.								
D Cardigan (County School)	Dr. D. Rees	5	1 6	72	..	45·81	225	157
D Lampeter (Falcondale)	Mr. W. T. Taylor	5	1 0	498	..	61·67	223	190
D Llandyssul (Talgarreg)	T. Ll. Stephens, Esq., for M.O.	5	1 0	600	..	(64·55)	(214)	(189)
M Yspytty-Ystwyth (Dolgroes)	The Meteorological Office	5	1 0	780	..	69·70	..	..
4.—TOWY. 46 sq. mi.								
d Abergwesyn (Nantneuadd)	The Meteorological Office	5	1 0	1000	..	79·37	..	178
M Tregaron (Maes-y-bettws)	The Meteorological Office	5	1 0	910	..	79·95	..	..
5.—WYE. 15 sq. mi.								
M Birmingham W.W. (Llyn Gynon)	F. W. Macaulay, Esq., C.E.	5	1 0	1500	..	82·10	..	..
M Birmingham WW (Bwlchyrhendre)	F. W. Macaulay, Esq., C.E.	5	1 0	1585	..	83·95	..	..
M Birmingham W.W. (Claerddu)	F. W. Macaulay, Esq., C.E.	5	1 0	1470	..	(93·24)	..	..
M Birmingham W.W. (Gwngu)	F. W. Macaulay, Esq., C.E.	5	1 0	1490	..	(80·75)	..	..
d Birmingham W.W. (Abergwngu)	F. W. Macaulay, Esq., C.E.	5	1 0	1150	..	87·35	..	222
M Plynlimon	The Meteorological Office	5	1 0	1630	108·0	111·70	..	..
BRECON. (Area, 733 sq. mi.)								
1.—TOWY. 17 sq. mi.								
2.—TAWE. 41 sq. mi.								
D Ystradgynlais (Yniscedwyn Ho.)	G. Coleman, Esq.	5	0 9	232	65·2	78·05	215	183
D Swansea W.W. (Nantyrwydd)	Lt.-Col. F. Hibbert, C.E.	5	0 10	908	90·8	99·62	242	211
3.—NEATH. 48 sq. mi.								
D Glyn Neath (P. Neath Vaughan)	Messrs. Curtis & Harvey, Ltd.	5	1 5	297	61·7	72·59	207	170
D Ystradfellte Reservoir	D. M. Davies, Esq., C.E.	5	1 0	1147	85·4	110·09	221	194
4.—TAFF. 48 sq. mi.								
D Aberdare (Nanthir Reservoir)	O. Williams, Esq. C.E.	5	1 0	860	59·6	56.24?	241	179
D Taff Fechan (Pontsticill) No. 12	A. C. Quiningborough, Esq.	5	1 0	1031	..	71·92	241	205
M Taff Fechan (Pontsticill West) 14	A. C. Quiningborough, Esq.	5	1 0	1254	..	74·30	..	..
D Cardiff W.W. (Llwynon Res.)	N. J. Peters, Esq., C.E.	5	1 0	860	57·8	74·88	232	192
w Cardiff W.W. (Troedyrhiw)	N. J. Peters, Esq., C.E.	5	1 0	860	63·6	80·89	..	..
D Cardiff W.W. (Pont-ar-daf)	N. J. Peters, Esq., C.E.	5	1 0	850	64·8	84·91	228	197
w Cardiff W.W. (Garw-nant)	N. J. Peters. Esq., C.E.	5	1 0	1100	67·1	91·11	..	..
‡w Cardiff W.W. (Nant-Gwineu)	N. J. Peters, Esq., C.E.	5	1 0	1275	54·3	71·09	..	..
w Cardiff W.W. (Nant-y-gou-garn)	N. J. Peters, Esq., C.E.	5	1 0	..	72·0	100·89	..	..
D Taff Fechan (Pentwyn Res. S.)	A. C. Quiningborough, Esq.	5	1 0	1120	..	83·56	244	201
Taff Fechan (Pentwyn Res. N.)	A. C. Quiningborough, Esq.	5	1 0	1090	..	(85·75)	..	..
w Cardiff W.W. (Nant Goch)	N. J. Peters, Esq., C.E.	5	1 0	..	55·8	74·11	..	..
w Cardiff W.W. (Nant Ddu)	N. J. Peters, Esq., C.E.	5	1 0	1560	71·5	98·45	..	..
w Cardiff W.W. (Storey Arms) No. 4	N. J. Peters, Esq., C.E.	5	1 0	1430	69·2	95·10	..	..
w Cardiff W.W. (Tyle Brith) No. 1	N. J. Peters, Esq., C.E.	5	1 0	2350	73·2	99·96	..	..
D Cardiff W.W. (Cantreff R.) No. 2	N. J. Peters, Esq., C.E.	5	1 0	1120	70·1	93·42	227	201
D Cardiff W.W. (Beacons Res.) No. 6	N. J. Peters, Esq., C.E.	5	1 0	1340	79·4	104·02	237	204
w Cardiff W.W. (Nant Penig) No. 3	N. J. Peters, Esq., C.E.	5	1 0	2000	87·5	121·60	..	..

‡ Gauge overexposed on moor.

DIVISION XI.—MONMOUTH, WALES, AND THE ISLANDS—(*con.*).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge Height of Rim above Ground.	Height of Ground above Sea Level.	Average Rainfall.	1928 Rainfall.	Days with .01 in. or more.	Days with .04 in. or more.
BRECON—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
4.—TAFF—(*con.*).								
D Taff Fechan (Neuadd Rs.) No. 1	A. C. Quiningborough, Esq.	5	1 0	1462	70·3	92·33	249	203
D Taff Fechan (Neuadd Rs.) No. 1A	A. C. Quiningborough, Esq.	5	1 0	1423	..	110·36	249	201
D Taff Fechan (Neuadd Rs.) No. 4	A. C. Quiningborough, Esq.	5	1 0	1487	82·7	107·89	249	203
D Taff Fechan (Neuadd Rs.) No. 11	A. C. Quiningborough, Esq.	5	1 0	1524	68·3	79·99	249	197
D Taff Fechan (Neuadd Rs.) No. 11A	A. C. Quiningborough, Esq.	5	1 0	1520	..	104·06	249	203
M Taff Fechan (Neuadd Rs.) No. 2	A. C. Quiningborough, Esq.	5	1 0	1993	72·7	92·93	..	..
M Taff Fechan (Neuadd Rs.) No. 5	A. C. Quiningborough, Esq.	5	1 0	1515	81·1	112·54	..	..
M Taff Fechan (Neuadd Rs.) No. 10	A. C. Quiningborough, Esq.	5	1 0	1700	72·7	98·31	..	..
M Taff Fechan (Neuadd Rs.) No. 3	A. C. Quiningborough, Esq.	5	1 0	1843	60·6	94·74	..	..
M Taff Fechan (Neuadd Rs.) No. 7	A. C. Quiningborough, Esq.	5	1 0	2017	81·1	119·97	..	..
M Taff Fechan (Neuadd Rs.) No. 8	A. C. Quiningborough, Esq.	5	1 0	1723	85·7	119·88	..	..
M Taff Fechan (Neuadd Rs.) No. 8A	A. C. Quiningborough, Esq.	5	1 0	1780	..	106·47	..	..
M Taff Fechan (Neuadd Rs.) No. 6A	A. C. Quiningborough, Esq.	5	1 0	2099	92·4	129·48	..	..
5.—RHYMNEY. 2 sq. mi.								
6.—EBBW. 7 sq. mi.								
D Ebbw Vale W.W. (Llangynidr) 1	P. I. Davies, Esq., C.E.	5	1 0	1413	58·8	72·55	199	183
D Ebbw V.W.W. (Llangynidr) W 3	P. I. Davies, Esq., C.E. ..	5	1 0	1468	..	82·18	199	184
D Ebbw V.W.W. (Llang'ndr) NW 2	P. I. Davies, Esq., C.E. ..	5	1 0	1471	..	77·74	200	185
D Ebbw Vale W.W. (Carno, S.) ..	P. I. Davies, Esq., C.E. ..	5	1 0	1262	..	70·33	201	185
D Ebbw Vale W.W. (Carno, E.) .	P. I. Davies, Esq., C.E. ..	5	1 0	1391	..	69·51	201	184
D Ebbw Vale W.W. (Carno, W.) .	P. I. Davies, Esq., C.E. ..	5	1 0	1412	..	73·22	201	187
D Ebbw Vale W.W. (Carno, N.) .	P. I. Davies, Esq., C.E. ..	5	1 0	1491	..	70·00	201	184
7.—USK. 299 sq. mi.								
Torpantau (Darenfawr)	Newport Corporation	5	1 0	1172	..	89·82	..	
Torpantau (Ynysposte)	Newport Corporation	5	1 0	741	..	86·75	..	..
Torpantau (Blaen-caer-fanell) .	Newport Corporation	5	1 0	1584	..	98·39	..	..
D Talybont (Pentir-rhiw)	Newport Corporation	5	1 0	587	..	75·26	225	185
Talybont (Pwll Ifor)	Newport Corporation	5	1 0	1224	..	82·93	..	..
D Crickhowell Rectory	Rev. G. Roberts	5	1 0	320	..	47·34	205	166
D Crickhowell (Gwernvale)	E. Pirie Gordon, Esq.....	5	1 0	393	41·5	46·16	239	170
D Crickhowell (Glanusk Park)	Lord Glanusk.....	5	1 0	290	..	53·81	229	185
M Swansea W.W. (Cray Rs.) No. 2	Major F. Hibbert	5	1 0	1019	..	111·29	..	..
D Swansea W.W. (Cray Rs.) No. 1 (+A)	Major F. Hibbert	5	1 0	1043	..	99·38	242	200
M Cray Post Office	The Meteorological Office .	5	1 0	930	..	92·54	..	..
M Talybont (Cwy Parc)	Miss E. Jones-Williams ..	5	1 6	480	..	61·40	..	..
D Llanfrynach (Ty-mawr)	Miss M. D. de Winton ...	5	1 0	450	..	44·39	194	155
M Crickhowell (Tal-y-maes)	The Meteorological Office .	5	1 0	1250	..	53·30	..	..
d Trecastle (Blaenau-hydfer)	The Meteorological Office	5	1 0	970	..	88·95	..	161
D Brecon (Tairbull School)	I. L. Price, Esq.	5	1 0	660	52·0	79·99	250	195
Brecon (Ffrwdgrech)	Capt. J. D. D. Evans	8	1 1	570	..	58·54	199	173
D Black Mountains (Blaen-y-cwm)	J. F. Jupp, Esq., C.E.	5	1 0	1423	..	60·90	235	196
D Black M. (Dam Site Grwyne Fawr)	J. F. Jupp, Esq., C.E.	5	1 0	1620	..	65·45	235	196
M Upper Chapel (Tymawr)	Mrs. Probert	5	1 0	945	46·9	63·35	..	..

DIVISION XI.—MONMOUTH, WALES, AND THE ISLANDS—(*con.*).

STATIONS.	AUTHORITIES.	Rain-gauge Diam.	Height of Rim above Ground.	Height of Ground above Sea Level.	Average Rainfall.	1928 Rainfall.	Days with ·01 in. or more.	Days with ·04 in. or more.
BRECON—(*con.*).		*in.*	*ft.*	*in.* *ft.*	*in.*	*in.*		
8.—WYE. 271 sq. mi.								
D Cathedine Rectory	The Meteorological Office	5	1	6 650	..	40·20	189	154
D Llanfihangel-Talyllyn, Sur.-Capt. E.O.B. Carbery, R.N. (Rtd.)		5	1	3 650	..	44·40	211	169
D Talgarth (Dan-y-garth)	F. Morgan, Esq.	5	1	0 400	..	33·81	193	149
D Talgarth (Pontiwal Sanatorium)	Dr. H. E. Watson	5	0	10 500	..	37·03	243	172
D Builth Wells (Tyn-y-berllan)	Dr. W. Black Jones	5	1	0 425	38·1	42·95	197	170
M Abergwesyn (Trallwn)	The Meteorological Office	5	1	0 1000	..	87·70	..	..
M Newbridge (Pengraig)	The Meteorological Office	5	1	0 960	56·8	71·50	..	..
D Newbridge (Llysdinam)	Sir C. Venables Llewelyn, Bt.	5	1	3 646	41·2	52·70	223	179
M Birm'gh'm W.W. (Cors-yr-hwch)	F. W. Macaulay, Esq., C.E.	5	1	0 1775	..	106·11	..	..
M Birm'gh'm W.W. (Esgair Ceiliog)	F. W. Macaulay, Esq., C.E.	5	1	0 1560	..	(99·96)	..	..
M Birm'gh'm W.W. (Llyn-Carw)	F. W. Macaulay, Esq., C.E.	5	1	0 1775	..	96·33	..	..
M Birm'gh'm W.W. (Nant-y-car)	F. W. Macaulay, Esq., C.E.	5	1	0 1545	..	(94·69)	..	..
M Birm'gh'm W.W. (Tyn-y-pant)	F. W. Macaulay, Esq., C.E.	5	1	0 1320	63·2	69·80	..	..
M Birm'gh'm W.W. (Esgair Garthen)	F. W. Macaulay, Esq., C.E.	5	1	0 1590	..	91·90	..	..
D Birm'gh'm W.W. (Elan Village)	F. W. Macaulay, Esq., C.E.	5	1	0 700	..	65·25	229	186
RADNOR. (Area, 474 sq. mi.)								
1.—WYE. 424 sq. mi.								
D Glasbury-on-Wye (Hampton Sc.)	Rev. D. C. Lloyd	5	1	0 274	33·9	36·70	194	163
D Builth (Cefndyrys)	Capt. E. A. Thomas	5	0	10 740	41·5	51·13	212	197
Builth Rd. (St. John's Vicarage)	Rev. Canon J. L. Bryans	5	1	0 550	41·9	49·53	232	175
M New Radnor (Gryliss)	H. Langston, Esq.	5	1	0 1200	..	46·46	..	..
D New Radnor (Harpton Crt. Gns)	Mr. C. W. Bowen	5	0	9 700	..	51·49	199	180
M New Radnor	John Langston, Esq.	5	1	4 720	44·1	48·54	..	..
D Llandrindod Wells	Rev. J. Ll. Herbert	5	1	0 699	39·3	52·81	234	178
D Birmingham WW (Tyrmynydd)	F. W. Macaulay, Esq., C.E.	5	1	0 832	62·1	70·46	239	194
D Birmingham W W (Nantgwillt)	F. W. Macaulay, Esq., C.E.	5	1	0 840	63·2	(71·16)	239	195
M Birmingham W. W. (Dwfnant)	F. W. Macaulay, Esq., C.E.	5	1	0 1050	67·8	81·30	..	..
M Birmingham WW (Esgair Gader) 2	F. W. Macaulay, Esq. .C.E.	5	1	0 1500	68·9	(80·02)	..	..
M Birmingham W.W. (Tynllidiart)	F. W. Macaulay, Esq., C.E.	5	1	0 1006	..	78·65	..	..
d Birmingham W.W. (Claerwen)	F. W. Macaulay, Esq., C.E.	5	1	0 1250	65·2	(84·98)	..	212
D Birmingham W.W. (Tynant)	F. W. Macaulay, Esq., C.E.	5	1	0 1020	63·6	80·55	241	200
D Rhayader (Penralley)	E. D. Prothero, Esq.	5	1	0 757	50·6	54·75	248	177
Rhayader (East Street)	R. Ashton, Esq.	5	1	0 700	..	55·03	..	..
M Bir'gham WW (Cerrigllwydion)	F. W. Macaulay, Esq., C.E.	5	1	0 1710	74·8	86·80	..	..
M Birm'gham WW (Pen-y-gareg)	F. W. Macaulay, Esq., C.E.	5	1	0 1500	55·2	(67·99)	..	..
M Birm'gham WW (Pen-y-gareg) 2	F. W. Macaulay, Esq., C.E.	5	1	0 1540	43·9	(71·93)	..	..
M Birmingham W.W. (Calettwr)	F. W. Macaulay, Esq., C.E.	5	1	0 1490	71·1	(89·96)	..	..
M Birmingham W.W. (Figin) No. 2	F. W. Macaulay, Esq., C.E.	5	1	0 1700	83·3	106·45	..	..
M Birmingham WW (Aberhenllan)	F. W. Macaulay, Esq., C.E.	5	1	0 1070	58·8	83·65	..	..
M Llanbister (Llananno)	The Meteorological Office	5	1	0 900	45·1	50·90	..	..
2.—SEVERN—Right Bank Tributaries. 50 sq. mi.								
MONTGOMERY. (Area, 797 sq. mi.)								
1.—DOVEY. 120 sq. mi.								
2.—YSTWYTH. 7 sq. mi.								
3.—WYE. 37 sq. mi.								
D Llangurig (Dernol)	The Meteorological Office	5	1	0 870	61·5	68·87	212	200
4.—SEVERN—Right Bank Tributaries. 154 sq. mi.								
d Llanidloes (Llidiartywaen Sch.)	G. E. Edwards, Esq.	5	1	3 1150	..	54·98	241	186
D Llandinam (Plas Dinam)	Mr. D. Bowen	5	1	0 436	37·4	48·05	212	185
D Newtown (Penarth Weir)	L. M. & S. Rly.	8	1	0 321	35·0	43·23	213	167
D Montgomery (Oakfield)	Dr. R. E. Game Phillips	5	1	0 450	..	35·21	213	173
D Welshpool (Edderton Hall)	Miss A. M. Howell Evans	5	1	0 500	28·3	33·61	219	173

DIVISION XI.—MONMOUTH, WALES, AND THE ISLANDS—(*con.*).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge Height of Rim above Ground.	Rain-gauge Height of Ground above Sea Level.	Average Rainfall.	1928 Rainfall.	1928 Days with ·01 in. or more.	1928 Days with ·04 in. or more.
MONTGOMERY—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
5.—SEVERN—Left Bank Tributaries. 479 sq. mi.								
D Trefeglwys	J. I. Wilson, Esq., for M.O.	5	1 0	350	..	51·19	170	165
D Berriew (Brithdir Hall)	Mrs. F. E. Marston	5	1 0	350	30·7	(35·55)	(184)	(159)
D Welshpool (County School)	John Ward, Esq.	5	1 0	254	30·1	35·48	181	149
D Welshpool (Fron Llwyd)	Lt.-Col. G. B. D. Harrison	5	1 3	500	33·7	41·12	237	181
Garthbibio (Bwlch Tomlyd)	The Meteorological Office.	5	1 0	1200	71·0	(98·90)	..	..
d Llandysilio Rectory	Rev. H. G. Dickinson	5	1 0	250	..	(33·32)	..	..
D Lake Vyrnwy	J. E. Bradley, Esq.	5	0 7	770	54·0	81·84	183	174
Lake Vyrnwy (Bryn Gwyn)	Col. J. R. Davidson, C.E.	8	1 0	1311	..	78·03	..	..
D Lake Vyrnwy (Bank Cynon Isaf)	Col. J. R. Davidson, C.E.	8	1 0	750	55·3	78·61	227	186
Lake Vyrnwy (Ty Uchaf)	Col. J. R. Davidson, C.E.	8	1 0	860	..	77·23	..	..
Lake Vyrnwy (Heol-y-ffridd) 1	Col. J. R. Davidson, C.E.	8	1 0	913	..	91·85	..	..
Lake Vyrnwy (Heol-y-ffridd) 2	Col. J. R. Davidson, C.E.	8	1 0	830	..	92·18	..	..
Lake Vyrnwy (Tyn-y-ffridd)	Col. J. R. Davidson, C.E.	8	1 0	1010	..	73·97	..	..
Lake Vyrnwy (Lluestwen)	Col. J. R. Davidson, C.E.	8	1 0	1667	..	93·56	..	..
Lake Vyrnwy (Llwynrhiw)	Col. J. R. Davidson, C.E.	8	1 0	1428	..	107·27	..	..
Lake Vyrnwy (Craig-y-Gribbin)	Col. J. R. Davidson, C.E.	8	1 0	1422	..	83·97	..	..
Lake Vyrnwy (Eunant Bridge)	Col. J. R. Davidson, C.E.	8	1 0	830	..	102·26	..	..
Lake Vyrnwy (Carreg Goch)	Col. J. R. Davidson, C.E.	8	1 0	1750	..	89·25	..	..
Lake Vyrnwy (Fawnog)	Col. J. R. Davidson, C.E.	8	1 0	1315	55·7	82·51	..	..
FLINT. (Area, 256 sq. mi.)								
1.—DEE. 198 sq. mi.								
D Hanmer (Gredington)	Lady Kenyon	5	1 0	300	30·4	34·41	218	178
D Overton (Fairleigh)	Dr. B. J. E. Wright	5	1 0	220	26·8	33·58	222	165
w Buckley (Hawarden W. W.)	W. Simmons, Esq.	5	1 0	540	28·7	32·50	..	..
D Hawarden (County School.)	A. Lyon, Esq.	5	0 9	280	27·2	28·28	206	139
D Mold (Mount Pleasant)	R. F. Baker, Esq., C.E.	5	1 0	503	..	33·12	221	172
D Northop (Soughton Hall)	Sir John Bankes	5	1 0	418	32·1	34·98	207	177
D Cilcain (Cilcen Hall)	W. B. Yates, Esq., C.B.E.	5	1 0	680	29·7	29·64	220	172
D Connah's Quay (Pengwladys)	R. F. Baker, Esq., C.E.	5	1 0	231	..	27·05	198	153
D Hawarden Bridge	Messrs. J. Summers & Sons	8	1 3	22	24·3	28·46	200	146
D Sealand* Aerodrome (+A)	The Meteorological Office.	8	1 0	16	26·0	27·60	200	138
D Mostyn Vicarage	Rev. W. Vaughan-Jones	5	1 0	100	33·2	30·89	224	162
2.—CLWYD. 51 sq. mi.								
d Bodfari (Nantlys)	D. F. Pennant, Esq., D.L.	5	1 5	178	27·4	30·24	..	153
D Bodfari (Cae Gwyn)	Mrs. Morgan	5	1 0	534	30·8	28·49	209	158
d St. Asaph (St. Beuno's Coll.)	Rev. Richard Dea	6	1 2	479	..	30·56	..	..
Dyserth Castle	J. B. Price, Esq.	5	1 0	350	..	26·12	..	..
D Rhyl (Sewage Works)	The Town Clerk	8	1 0	30	25·3	27·67	215	140
3.—SEVERN—Left Bank Tributaries. 7 sq. mi.								
DENBIGH. (Area, 668 sq. mi.)								
1.—DEE. 278 sq. mi.								
Glynceiriog (Plas Nantyr)	C. B. C. Storey, Esq.	6	1 0	1450	..	63·95	..	..
D Chirk Castle Gardens	Lord Howard de Walden	5	1 0	630	..	41·74	182	171
D Ruabon (Trevor Hall)	E. Lloyd Edwards, Esq.	5	1 0	500	30·9	40·07	200	174
D Wrexham W.W. (Ty Mawr Res.)	J. A. Davies, Esq.	5	0 9	805	39·1	41·20	224	167
D Wrexham W.W. (Pack Saddle Res.)	J. A. Davies, Esq.	5	0 9	376	32·0	37·64	238	174
D Wrexham W.W. (Cae Llwyd Res.)	J. A Davies, Esq.	8	0 9	918	41·1	43·90	223	178
D Wrexham W.W. (Cae Llwyd Res.)	J. A. Davies, Esq.	5	0 9	918	40·5	41·05	224	174

* Formerly called Shotwick.

DIVISION XI.—MONMOUTH, WALES, AND THE ISLANDS.—(*con.*).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge Height of Rim above Ground.	Height of Ground above Sea Level.	Average Rainfall.	1928 Rainfall.	1928 Days with ·01 in. or more.	1928 Days with ·04 in. or more.
DENBIGH—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
1.—DEE—(*con.*).								
D Brymbo (Pentre Broughton Schl.)	D. E. Rees, Esq.	5	1 0	680	..	32·37	180	150
d Wrexham (Beechley Road)	O. L. Jones, Esq.	2	1 0	278	..	34·32	..	..
Wrexham (Madeira Hill)	O. L. Jones, Esq.	5	1 0	281	..	33·72	..	..
d Llanfihangel-glyn-myfyr	R. F. Baker, Esq., C.E.	5	1 0	898	..	57·47	..	194
D R. Alwen (Alwen Dam)	R. F. Baker, Esq., C.E.	5	1 0	1189	..	64·71	250	203
D R. Alwen (Hafod-llan-isaf) No. 2	R. F. Baker, Esq., C.E.	5	1 0	1172	39·2	48·43	240	194
D R. Alwen (Hafod-llan-isaf) No 3	R. F. Baker, Esq., C.E.	5	1 0	1169	36·8	49·48	242	193
Gresford (Horsley Hall Gardens)	R. H. Crockford, Esq.	5	0 10	100	..	32·74	207	159
Pentre Voelas (Nant Heilyn)	R. F. Baker, Esq., C.E.	5	1 0	1225	..	62·58	..	..
D R. Brenig (Hafod-yr-Onen)	R. F. Baker, Esq., C.E.	5	1 0	1175	..	50·63	226	196
M Nantglyn (Pant-y-maen)	R. F. Baker, Esq., C.E.	8	1 0	1320	..	61·72	..	..
M Llyn Bran	R. F. Baker, Esq., C.E.	8	1 0	1428	..	65·10	..	..
2.—CLWYD & C. 267 sq. mi.								
Derwen (Ty Cerrig)	Edgar Billson, Esq.	5	1 3	1030	..	44·28	..	..
D Pentre Celyn Council School	E. E. Davies, Esq.	5	1 3	400	30·1	33·53	177	155
d Clawdd-newydd	R. F. Baker, Esq., C.E.	5	1 0	1004	..	(41·88)	..	(168)
d Clawdd-newydd No. 2	R. F. Baker, Esq., C.E.	5	1 0	1004	..	(44·80)	(183)	(170)
D Ruthin (Bwlch Tunnel)	R. F. Baker, Esq., C.E.	5	1 0	908	..	34·92	236	169
D Llangynhafal (Plâs Drâw)	Major R. Bromhead	5	1 0	419	31·1	36·09	247	188
d Gwytherin Council School	C. E. Jones, Esq.	5	1 1	730	50·1	55·99	..	..
D Denbigh (Mental Hospital)	W. Barker, Esq.	4	1 0	316	..	35·45	201	165
D Denbigh (Garn)	J. D.W. Griffith, Esq.	5	1 0	447	32·7	36·51	209	160
M Llanefydd (Dolwen Res., S.)	O. P. Cronshaw, Esq.	5	1 0	600	..	36·00	..	..
D Llanefydd (Plas Uchaf Res.)	O. P. Cronshaw, Esq.	5	1 0	485	..	33·03	223	162
D Llanefydd (Glascoed Res.)	O. P. Cronshaw, Esq.	5	1 0	360	..	30·75	223	160
St. Asaph (Wigfair) (R)	Col. H.C.Ll.Howard, C.M.G.	8	2 4	250	..	(27·64)	..	..
D Abergele (Sea Road)	Sydney Wilson, Esq.	5	1 0	25	28·4	30·30	198	150
D Colwyn Bay (Council Offices)	W. J. Dunning, Esq., C.E.	5	1 0	81	..	32·95	195	158
3.—CONWAY—4 sq. mi.								
D Pentre Voelas (Voelas Hall)	Mr. T. N. Dickie	5	1 6	640	..	71·52	222	198
D Bettws-y-Coed (Rhydycrena)	Mrs. G. Bovill	5	1 0	50	..	70·27	242	194
4.—SEVERN—Left Bank Tributaries. 47 sq. mi.								
D Llanrhaiadr-yn-Mochnant	David F. Jones, Esq.	5	1 0	512	41·2	55·73	249	184
D Llansilin (Penygwely Res.)	G. W. Lacey, Esq., C.E.	5	1 0	1095	..	47·64	219	187
MERIONETH. (Area, 661 sq. mi.)								
1.—DEE. 218 sq. mi.								
D Llanuwchllyn	O. L. Jones, Esq.	5	1 0	550	..	80·14	219	180
D Bala (Eryl Aran)	Mrs. Burton	8	1 0	600	54·6	73·44	216	198
D Llanderfel (Palé Gardens)	Mr. G. A. Edwards	8	1 0	606	48·2	61·09	233	185
Trawsfynydd (Cwm Prysor)	N. Wales Power Co., Ltd.	5	1 0	1290	..	110·00	..	..
D Corwen (Rûg Gardens)	Col. R. Vaughan Wynn	8	1 2	600	..	45·91	242	183
2.—CLWYD. 7 sq. mi.								
3.—GLASLYN. 92 sq. mi.								
Trawsfynydd (Tyn Twll)	N. Wales Power Co., Ltd.	5	1 0	700	..	(115·20)	..	..
* D Minffordd (Hafod-Cae-Maen)	G. H. C. Haigh, Esq.	5	1 0	100	50·5	65·72	248	194
D Tan-y-bwlch (Gelligrin)	J. Roberts, Esq.	5	1 0	24	..	59·48?	235	193
D Tan-y-bwlch (Plas Gardens)	Mr. F. W. Dawe	5	1 0	55	..	79·50	243	198
D Tan-y-bwlch (Dol-y-Moch)	Mrs. Howland Jackson	5	1 0	55	..	81·12	213	184
D Festiniog (Hafod Fawr)	Office of Woods	8	1 0	900	74·6	101·93	230	216
D Blaenau Festiniog (Oakeley Q.)	J. Lloyd Humphreys, Esq.	5	0 10	1100	97·1	146·57	(219)	(194)
D Blaenau Festiniog (Llechwedd Q.)	Messrs. J.W. Greaves & Sons	5	1 0	700	..	146·56	257	216

* Formerly called Penrhyndeudraeth.

DIVISION XI.—MONMOUTH, WALES, AND THE ISLANDS—(*con.*).

STATIONS.	AUTHORITIES.	Rain-gauge Diam.	Height of Rim above Ground.	Height of Ground above Sea Level.	Average Rainfall.	1928 Rainfall.	Days with .01 in. or more.	Days with .04 in. or more.
MERIONETH—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
4.—MAWDDACH & C. 262 sq. mi.								
D Towyn (Ynys-y-Maengwyn)	R. Corbett, Esq.	5	1 0	14	..	54·05	215	179
D Towyn (Bronffynnon)	Dr. T. Henry Jones	5	1 0	180	44·2	51·18	220	177
D Towyn (Peniarth)	Mrs. Wynne	8	1 0	25	..	61·56	219	190
D Tal-y-llyn Rectory	Rev. J. Pryce Jones	5	1 0	280	..	93·52	220	189
D Dolgelly (Dol'rhyd)	Col. P. H. Enthoven, D.L.	5	0 9	100	..	71·33	250	186
D Dolgelly (Bryntirion)	E. P. Beale, Esq.	5	0 10	50	58·8	73·83	235	190
Dyffryn (Berwyn Garage)	J. Griffiths, Esq.	5	1 0	120	..	53·70	..	..
D Trawsfynydd Camp	E. Jones, Esq.	5	1 0	800	67·0	84·40	205	193
5.—DOVEY. 82 sq. mi.								
d Aberdovey (Plas Penhelig)	J. M. Howell, Esq., D.L.	5	1 0	120	..	52·45	..	..
Aberdovey (Bryneithin)	Miss E. V. Winser	5	1 0	70	..	50·75	..	..
D Pennal (Talgarth Hall)	Owen D. Jones, Esq.	5	0 9	125	..	74·10	204	179
Dinas Mawddwy (Dol. Hall)	Sydney Wilson, Esq.	5	1 0	250	65·2	80·44	..	..
6.—SEVERN—Left Bank Tributaries.								
CARNARVON. (Area, 572 sq. mi.)								
1.—BARDSEY ISLAND.								
2.—CONWAY & C. 146 sq. mi.								
M Lake Cowlyd (Llethyr Gwyn)	cC. F. Farrington, Esq., C.E.	5	1 0	1700	..	132·25	201	..
M Lake Cowlyd (Ffrith Fawr)	bC. F Farrington, Esq., C.E.	5	1 0	1700	..	102·06	201	..
M L. Cowlyd (Ffrith Carreg Wen)	aC. F. Farrington, Esq., C.E.	5	1 0	1168	..	111·50	201	..
D Trefriw Wells	C. P. Adamson, Esq.	5	1 0	25	..	69·44	185	156
D Lake Eigiau (Dam Site)	(+A) N. Wales Power Co., Ltd.	5	1 5	1244	83·9	89·77	255	205
w Llanbedr-y-Cennin (Plasdulyn)	W. T. Ward, Esq., C.E.	8	1 0	509	..	69·88	..	..
D Tyn-y-Groes (Dolcrwm)	R. S. Fisher, Esq.	5	1 0	100	..	58·15	219	179
D Tyn-y-Groes (Roe Wen)	Albert Wilson, Esq.	5	1 0	140	..	56·65	229	182
D Conway (Castle Bank)	Ministry of Agric. & Fisheries	5	1 0	50	..	36·13	200	162
Deganwy (Y Berlfa)	Willoughby Gardner, Esq.	5	1 0	35	..	35·16	..	..
D Llandudno (Glanwydden School)	Thomas Roberts, Esq.	5	1 0	28	28·7	28·25	194	152
D Llandudno	E. R. Williams, Esq.	5	1 0	13	..	29·79	200	149
3.—MENAI STRAITS. 221 sq. mi.								
d Edeyrn Tydweiliog (Cefnamwlch)	C. A. Thomas, Esq.	5	1 0	300	..	53·48	..	161
D Madryn Castle (Farm School)	J. Hines, Esq.	5	1 0	278	39·0	56·80	240	187
Llanaelhaiarn (Cl. School)	J. Hughes, Esq.	5	1 0	300	51·6	59·93	..	..
Nantlle (Dorothea Quarries)	W. J. Griffith, Esq.	8	60 0	350	..	74·93	..	..
Llandwrog (Glynllivon Park)	Hon. F. G. Wynn	5	1 0	100	44·7	49·84	..	..
D Llandwrog (Glynllivon Nursery)	Hon. F. G. Wynn	5	1 0	180	..	53·93	216	178
Llandwrog (Glynllivon Garden)	Hon. F. G. Wynn	5	1 0	100	..	50·92	215	180
Llandwrog (Glynllivon Fort)	Hon. F. G. Wynn	5	1 0	200	..	54·41	223	179
D Bettws Garmon	Rev. T. C. V. Bastow	5	1 0	414	64·4	81·20	224	191
Carnarvon (Belan Fort)	Hon. F. G. Wynn	5	1 0	15	33·9	42·93	..	..
Lake Ogwen	R. Hughes, Esq.	5	1 0	1006	..	120·34	..	..
D Llanbeblig (Cefn Rhos)	Miss A. Preece	8	1 0	..	..	51·61	225	189
Llanberis (Brynrefail School)	Gwilym Jones, Esq.	5	1 3	360	56·5	62·39	184	..
d Llanberis (Llandinorwig School)	John Roberts, Esq.	5	0 10	850	59·4	84·92	..	..
D Bethesda (St. Ann's Vicarage)	Rev. Canon W. Morgan	5	1 6	500	59·8	73·85	248	183
D Bethesda (Penrhyn Quarries)	A. H. Richards, Esq.	8	1 0	527	65·8	81·93	241	211
D Bangor (Penrhyn Castle Gdns.)	Mr. J. Kneller	5	1 0	150	..	50·60	212	192
D Bangor (Town Hall)	Water Engineer & Surveyor	8	1 6	50	..	51·92	181	162
D Aber (University Coll. Farm)	Prof. R. G. White	5	1 0	80	..	50·48	205	190
D Llanfairfechan School	Mr. W. Timmins	5	1 0	103	37·9	43·88	215	172
d Penmaenmawr (Council Offices)	J. Parry-Hughes, Esq.	5	1 4	60	..	41·86	..	..
D Penmaenmawr (Glan-y-Coed)	W. H. Brady, Esq.	5	1 6	100	..	45·66	198	183
w Penmaenmaur (Mountain Res.)	J. Parry-Hughes, Esq.	5	1 6	1100	..	60·21	..	..

DIVISION XI.—MONMOUTH, WALES, AND THE ISLANDS—(*con.*).

	STATIONS.	AUTHORITIES.	Diam.	Rain-gauge: Height of Rim above Ground.	Rain-gauge: Height of Ground above Sea Level.	Average Rainfall.	1928: Rainfall.	1928: Days with ·01 in. or more.	1928: Days with ·04 in. or more.
	CARNARVON—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
	4.—ERCH & C. 155 sq. mi.								
D	Abersoch	Lady Winterbotham	8	1 0	100	44·3	48·71	221	177
	Pwllheli (Bodfean Hall)	Hon. F. G. Wynn	5	1 0	180	43·7	53·07	..	..
D	Pwllheli (Bodfean Hall Gdns.)	Hon. F. G. Wynn	5	3 9	155	43·2	50·98	204	176
	5.—GLASLYN. 50 sq. mi.								
D	Portmadoc (Wern)	R. M. Greaves, Esq.	5	1 0	90	..	65·77	238	186
	Beddgelert (Co. School)	D. Jones, Esq.	5	1 2	133	..	120·85	..	..
	Snowdon (Wenallt)	No. 6 N. Wales Power Co., Ltd.	5	1 2	1050	..	167·35	..	..
D	Snowdon (Cwm Dyli)	No. 11 N. Wales Power Co., Ltd.	5	1 0	310	117·9	160·07	256	226
	Snowdon (Cwm Dyli, Old Rd.)	14 N. Wales Power Co., Ltd.	5	0 10	325	..	158·62	..	..
	Snowdon (Llewedd)	No. 2 N. Wales Power Co., Ltd.	5	1 3	1485	..	137·97	..	..
M	Snowdon (Delta)	No. 7 N. Wales Power Co., Ltd.	5	1 0	1435	..	208·00	..	..
M	Snowdon (Glaslyn)	No. 3 N. Wales Power Co., Ltd.	5	0 8	2050	..	173·53	..	..
M	Snowdon (Teyrn)	No. 1 N. Wales Power Co., Ltd.	5	1 0	1080	..	178·55	..	..
d	Snowdon (Llydaw Intake)	No. 10 N. Wales Power Co., Ltd.	5	1 0	1480	..	176·91	(256)	(236)
d	Snowdon (L. Llydaw Copper M.)	9 N. Wales Power Co., Ltd.	5	1 5	1480	..	183·33	(221)	(207)
M	Snowdon (Llyn Llydaw)	No. 5 N. Wales Power Co., Ltd.	5	1 0	1470	..	164·03	..	..
M	Snowdon (Crib Goch)	No. 8 N. Wales Power Co., Ltd.	5	1 3	2340	..	211·10	..	..
	ANGLESEY. (Area, 275 sq. mi.)								
D	Llangadwaladr (Bodorgan)	Mr. W. Pilgrim	5	1 0	100	37·5	44·26	219	169
	Llanfaelog	H. S. Lowe, Esq., J.P.	5	1 0	50	32·0	35·05	..	..
D	Llangefni (Fronheulog)	A. H. Withinshaw, Esq.	5	1 0	125	..	44·32	179	159
	Beaumaris (Fryars)	Mrs. Burton	10	1 6	20	37·4	49·26	..	..
D	Llangwllog (Trescawen)	Mrs. Pritchard-Rayner	5	1 0	239	42·2	53·72	232	188
D	Bodedern (Presaddfed)	Lt.-Col. W. A. Fox-Pitt	5	1 0	150	38·9	47·82	225	179
D	Holyhead (Salt Island)	(+A) The Meteorological Office	8	1 0	25	34·8	40·70	204	156
D	Llanerchymedd Llwydiarth Esgb.	Miss J. E. Prichard	5	1 0	175	38·1	46·03	225	182
D	Penrhoslligwy School	T. Rowlands, Esq.	5	1 0	140	39·9	48·04	205	172
D	Lligwy	Lord Boston	6	1 0	170	34·6	44·50	200	159
D	Amlwch (Dyffryn Adda)	Major T. Fanning Evans	5	1 3	178	36·3	45·83	222	168
	ISLE OF MAN. (Area, 227 sq. mi.)								
D	Castletown (Langness)	Com'rs. of N. Lighth's	5	1 9	38	..	41·84 ?	230	175
D	Port St. Mary (Beach Villa)	C. F. Butterworth, Esq.	5	3 0	40	..	39·11	202	159
	Santan Vicarage	Rev. R. Jones	5	1 0	245	..	46·97	206	172
D	Douglas (Borough Cemetery)	H. A. Bridge, Esq.	8	1 0	284	41·2	57·38	240	191
D	Douglas (Clypse Res., Onchan)	Alan Boothman, Esq., C.E.	8	1 0	440	43·9	55·26	243	179
D	Baldwin Reservoir	Alan Boothman, Esq., C.E.	8	0 8	480	..	71·75	240	194
d	Maughold Head	Com'rs. of N. Lighth's.	5	0 6	230	..	52·63 ?	..	174
D	Ramsey (Town Hall)	The Town Surveyor	8	21 0	18	..	67·43	226	174
D	Ramsey (North Promenade)	The Town Surveyor	5	1 0	15	..	65·35	229	182
	CHANNEL ISLANDS. (Area, 76 sq. mi.)								
	JERSEY. 45 sq. mi.								
D	Pontac	Mrs. E. G. Barnes*	5	1 6	30	..	41·34	191	154
D	Grouville	L. de Carteret Malet, Esq.*	5	1 6	70	..	45·42	185	149
D	St. Heliers (Harbour Office)	Harbour Master	8	0 10	28	..	41·27	176	145
D	St. Helier's (St. Louis Obs.) (R)	Rev. C. Burdo, S.J.	8	5 9	180	30·4	40·94	197	141
D	St. Helier's (St. Louis O.) (New) (R.)	Rev. C. Burdo, S.J.	8	1 5	180	31·9	42·62	196	144
D	St. Brelade (La Sergenté)	J. E. Le Boutillier, Esq.	5	1 4	194	..	40·84	195	155
D	St. Aubins (Belle Vue)	C. J. Sumner, Esq.	5	1 2	220	..	44·47	208	163
D	St. Saviours (Beauvoir)	Capt. G. T. Robin	5	0 10	200	..	42·26	193	158
D	St. Lawrence (Little Grove)	R. E. B. Voisin, Esq.	5	1 0	60	..	46·21	198	156
D	Millbrook (St. Helier W.W.)	A. J. Jenkins, Esq., C.E.	5	0 11	53	..	46·56	197	154
D	St. Ouen's Manor	R. Malet de Carteret, Esq.	5	1 0	270	..	43·86	186	150
D	Trinity Rectory	Rev. S. J. Gruchy	5	1 0	375	..	40·09	203	144

*per A. J. Jenkins, Esq.

DIVISION XI.—MONMOUTH, WALES, AND THE ISLANDS.—(*con.*).

STATIONS.	AUTHORITIES.	Rain-gauge: Diam.	Height of Rim above Ground.	Height of Ground above Sea Level.	Average Rainfall.	1928: Rainfall.	Days with ·01 in. or more.	Days with ·04 in. or more.
CHANNEL ISLANDS—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
GUERNSEY. 25 sq. mi.								
D St. Peter in the Wood (Hawthorns)	L. J. Nicolle, Esq.	5	1 0	100	..	35·99	182	140
D St. Martin's (Les Blanches)	B. T. Rowswell, Esq.	5	1 0	309	..	42·30	194	156
D St. Martin's Rectory	Rev. R. Coulthard	5	1 0	310	..	46·15	195	159
D St. Martin's (Hautnez)	A. A. Allain, Esq., C.E.	5	0 8	336	..	42·23	203	156
D Fort Road (La Cotte)	Major S. Carey Curtis	5	1 0	285	..	42·46	187	144
D Villiaze	A. A. Allain, Esq., C.E.	5	0 6	302	..	42·09	192	155
D St. Andrew (Vauxbelets Col.)	The Director	5	1 5	260	..	40·00	168	143
D St. Peter Port (Wireless Station)	Meteorological Office	8	1 0	295	..	41·25	202	150
D St. Peter Port (Grange Road)	H. Vere Miles, Esq.	5	1 0	175	33·2	45·05	194	150
D St. Peter Port (Market Street)	B. T. Rowswell, Esq.	5	52 8	99	..	44·40	192	151
D Castel (King's Mills)	A. A. Allain, Esq., C.E.	5	2 0	47	..	40·32	184	149
D Rohais (Colborne Villa)	T. J. Guilbert, Esq., C.E.	5	1 0	116	..	41·97	199	149
D Menheniot Vineries	Major H. Roper	5	1 1	97	..	44·63	191	159
D L'Ancresse (Doyle Pavilion)	H. Vere Miles, Esq.	5	1 0	40	..	39·50	176	148
SARK. 2 sq. mi.								
D Pointe Robert	B. T. Rowswell, Esq.	5	1 0	214	..	37·92	197	159
HERM. 1 sq. mi.								
D Herm	Sir Percival Perry	5	1 3	8	..	34·65	171	131
ALDERNEY. 3 sq. mi.								
D St. Anne (Gros Nez House)	G. D. Drewitt, Esq. M.E.	5	1 6	214	..	39·13	171	146

SCOTLAND.

DIVISION XII.—SOUTHERN COUNTIES.

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge: Height of Rim above Ground.	Rain-gauge: Height of Ground above Sea Level.	Average Rainfall.	1928: Rainfall.	1928: Days with ·01 in. or more.	1928: Days with ·04 in. or more.
WIGTOWN. (Area, 488 sq. mi.)		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
1.—LOCH RYAN. 46 sq. mi.								
Loch Ryan Lighthouse	Com'rs. of N. Lighthouses	5	1 3	10	..	53·65	198	169
2.—WESTERN GALLOWAY. 44 sq. mi.								
D Logan House	K. McDouall Esq.	8	1 0	80	..	52·40	268	190
Corsewall	Com'rs. of N. Lighthouses	8	4 1	48	..	52·70	..	166
3.—LUCE BAY. 186 sq. mi.								
D Whithorn (Physgill)	F. B. Hopkins, Esq.	5	1 0	170	..	51·82	220	172
D Whithorn (Glasserton)	Adm. Johnston Stewart, C.B.	5	1 0	225	..	55·26	219	173
D Port William (Monreith)	Major R. F. Brebner	5	1 0	145	..	56·85	226	186
D Stoneykirk (Ardwell House)	Sir E. Orde Stewart, Bt.	8	3 0	65	36·3	50·39	234	180
D New Luce (Public School)	J. Mackay, Esq.	5	1 0	200	..	64·14	228	195
4.—CREE & WIGTOWN BAY. 212 sq. mi.								
Garliestown (Galloway House)	Capt. McEacharn	5	1 6	30	39·1	61·53	198	178
D Kirkcowan (Craighlaw)	Major W. M. F. Hamilton	5	0 9	300	..	66·16	221	200
D Newton Stewart (Little Barraer)	Brig.-Gen. G. M. P. Hawthorn, C.B.E., D.S.O.	5	1 0	180	..	63·79	231	192
KIRKCUDBRIGHT. (Area, 902 sq. mi.)								
1.—DOON. 16 sq. mi.								
2.—CREE & WIGTOWN BAY. 222 sq. mi.								
D Borgue (Knockbrex)	J. Douglas Brown, Esq.	5	1 0	10	..	59·00	232	184
3.—DEE. 377 sq. mi.								
Little Ross Lighthouse	Com'rs. of N. Lighthouses	8	4 8	136	..	46·65	..	174
D Mossdale (Hensol)	Mrs. Cuninghame	8	1 0	200	..	80·70	249	204
D Dalry (Glendarroch)	Miss M. Barbour	5	0 11	192	54·5	75·58	240	199
D Dalry (Garroch)	Arthur Young, Esq.	8	1 3	250	..	88·84	232	204
D Dalry (Forrest Lodge)	Sir John Wood, Bart., M.P.	5	1 0	500	..	94·00	251	227
D Carsphairn (Shiel)	Mr. S. Wilson	5	1 0	850	..	99·79	250	218
D Carsphairn (Knockgray)	Miss Clark Kennedy	8	1 0	641	..	76·41	249	204
4.—URR & C. 196 sq. mi.								
Auchencairn (Torr House)	Thomas Ovens, Esq.	5	1 0	50	47·1	72·11	..	..
D Dalbeattie (Kirkennan)	Wellwood Maxwell, Esq.	5	0 9	30	..	68·72	220	189
D Dalbeattie (Drumstinchall)	Mrs. R. F. Hanbury	8	0 11	400	..	66·51	226	202
5.—NITH & C. 91 sq. mi.								
d Dumfries (Cargen)	Col. R. F. Dudgeon	5	0 10	85	44·8	68·61	..	..
D Lochrutton (Dumfries W.W.)	J. Smellie, Esq.	5	1 0	273	..	69·12	252	201
D Dumfries (Lincluden House)	Miss P. A. Young, M.B.E.	5	1 0	60	..	56·88	220	180

DIVISION XII.—SOUTHERN COUNTIES—(*con.*).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge: Height of Rim above Ground.	Rain-gauge: Height of Ground above Sea Level.	Average Rainfall.	1928: Rainfall.	1928: Days with ·01 in. or more.	1928: Days with ·04 in. or more.
DUMFRIES. (Area, 1074 sq. mi.)		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
1.—CLYDE—Right Bank Tributaries. 5 sq. mi.								
2.—URR. 6 sq. mi.								
3.—NITH & C. 421 sq. mi.								
D Ruthwell (Comlongon Castle)	Earl of Mansfield	5	1 0	67	..	53·65	226	180
D Mouswald (Schoolhouse)	Jas. F. Young, Esq.	8	0 9	116	..	67·42	236	199
D Dumfries (Crichton Roy. Inst.)	C. C. Easterbrook, Esq., M.D.	5	1 0	140	36·8	54·51	220	177
D Carnsalloch	Miss K. M. Buchanan	5	0 8	20	..	55·90	216	188
D Moniaive (Glencrosh)	Miss Macmillan	5	1 1	400	..	69·00	230	199
4.—ANNAN. 367 sq. mi.								
D Dalton (Whitecroft)	Sir W. Maitland-Heriot	5	0 6	240	..	59·83	232	189
D Dalton (Kirkwood)	Captain J. Steel	5	0 8	245	..	65·06	275	202
d Lockerbie (Castle Milk)	Mr. David McIntosh	5	0 9	199	..	62·46	..	..
M Lockerbie (Thornbank)	W. Murdoch, Esq.	5	1 0	259	..	60·56	..	..
D Lochmaben (Esthwaite)	W. J. Halliday, Esq., M.B.E.	5	1 0	166	41·9	60·47	236	196
5.—ESK. 275 sq. mi.								
D Eaglesfield (Springkell Gdns.)	Mr. Charles George	5	0 5	300	..	64·27	211	186
M Canonbie (Byreburnfoot)	Mr. David Crabbe	3	0 9	160	42·1	67·00	..	..
D Canonbie (Irvine House)	J. H. Milne Home, Esq.	5	0 9	200	..	74·01	232	194
d Langholm (Drove Road)	Mrs. Jackson	5	0 9	270	..	78·36	206	189
Langholm (Ewes)	Mrs. Lyall	5	1 0	445	..	80·91	..	..
D Eskdalemuir Observatory (+A)	The Meteorological Office	8	1 4	794	..	87·49	244	204
ROXBURGH. (Area, 666 sq. mi.)								
1.—NORTH TYNE. 6 sq. mi.								
2.—TWEED LOWER—Right Bank Tributaries. 57 sq. mi.								
D Kelso (Lempitlaw)	J. Stirling, Esq.	5	1 0	635	..	28·41	211	164
3.—TWEED—Teviot & c. 431 sq. mi.								
D Hawick (Wolfelee)	Mrs. Browne	5	0 10	537	37·6	47·31	204	172
d Hawick (Branxholm Park)	C. W. Grieve, Esq.	5	0 6	457	33·4	50·34	229	192
D Roberton Manse	Rev. A. E. McInnes, M.A.	5	2 0	730	..	45·55	200	177
D Denholm (Spital Tower)	T. G. Leadbetter, Esq.	5	0 9	410	..	40·06	238	177
D Jedburgh (Jedneuk)	T. Yool, Esq.	5	1 0	271	..	28·60	202	153
Jedburgh (Crailing)	Major J. A. Paton	4	1 1	195	..	29·47	..	..
D Ancrum (Monteviot)	Bertram Talbot, Esq.	5	1 0	250	..	32·83	213	163
Linton (Clifton Park)	T. R. B. Elliot, Esq.	5	1 0	250	..	25·50	..	..
D St. Boswells (The Fens)	J. J. Fairbairn, Esq.	5	1 6	260	28·0	28·11	172	144
W St. Boswells (Monksford)	Lt.-Col. A. Mitchell	5	0 11	320	..	36·04	..	..
D Kelso (Springwood Park)	Mr. W. Chaplin	5	1 0	130	..	26·53	171	144
4.—TWEED—Ettrick & c. 10 sq. mi.								
D Melrose (Asylum) *gauge* A	T. C. Mitchell, Esq.	5	0 6	480	..	40·09	219	171
D Melrose (Asylum) *gauge* B	T. C. Mitchell, Esq.	5	1 0	480	..	37·84	219	171
5.—TWEED—Gala. 6 sq. mi.								
6.—TWEED—Leader & c. 25 sq. mi.								
D Melrose (Drygrange)	A. T. Roberts, Esq.	5	1 0	360	..	32·68	223	159
7.—TWEED, LOWER—Left Bank Tributaries. 25 sq. mi.								
D Kelso (Broomlands)	J. C. Scott, Esq.	5	1 0	195	26·0	25·75	222	152
8.—ESK. 106 sq. mi.								
d Newcastleton Forest	Forestry Commission	5	1 0	700	..	74·67	..	..

DIVISION XIII.—SOUTH-EASTERN COUNTIES.

STATIONS.	AUTHORITIES.	Rain-gauge: Diam.	Height of Rim above Ground.	Height of Ground above Sea Level.	Average Rainfall.	1928: Rainfall.	Days with ·01 in. or more.	Days with ·04 in. or more.
SELKIRK. (Area, 268 sq. mi.)		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
1.—TWEED—Teviot & c. 34 sq. mi.								
2.—TWEED—Ettrick & c. 192 sq. mi.								
D Ettrick Manse	Rev. A. Horn	5	1 0	796	..	80·77	244	215
M Edinburgh W.W.(Meggat Hd.)	Messrs. Leslie & Reid, C.E	8	1 3	1496	..	70·01	..	..
Selkirk (Lindean Reservoir)	S. Pittillo, Esq.	5	1 0	900	..	38·67	..	..
3.—TWEED, UPPER—Right Bank Tributaries. 17 sq. mi.								
4.—TWEED, UPPER—Left Bank Tributaries. 19 sq. mi.								
D Caddonfoot (Fairnilee)	Alex. F. Roberts, Esq.	5	1 0	450	..	43·11	218	180
Galashiels (The Peel Clovenfords)	W. R. Ovens, Esq.	5	1 6	450	..	43·61	..	..
5.—TWEED—Gala. 6 sq. mi.								
D Galashiels (Abbotsford Road)	Dr. J. W. Somerville	5	0 9	416	31·7	34·91	210	164
PEEBLES. (Area, 348 sq. mi.)								
1.—TWEED, UPPER—Right Bank Tributaries. 127 sq. mi.								
M Edin. WW (Ravenscraig). 3	Messrs. Leslie & Reid, C.E.	5	1 3	2258	..	102·15	..	..
M Edin. WW (Gameshope Loch) .4	Messrs. Leslie & Reid, C.E.	5	1 3	1860	..	96·05	..	..
M Edin. WW (Loch Craig Head) .2	Messrs. Leslie & Reid, C.E.	5	1 0	2627	..	82·01	..	..
M Edin. WW (Gameshope Farm).5	Messrs. Leslie & Reid, C.E.	5	1 3	1538	..	93·63	..	..
M Edin. WW (Talla Linns Foot) .6	Messrs. Leslie & Reid, C.E.	8	1 3	966	..	80·05	..	..
M Edin. WW (Quarter Hill).... .7	Messrs. Leslie & Reid, C.E.	8	1 3	1196	..	65·63	..	..
D Edin. WW (Victoria Lodge) ...8	Messrs. Leslie & Reid, C.E.	5	1 3	900	..	66·99	250	199
2.—TWEED, UPPER—Left Bank Tributaries. 192 sq. mi.								
D Stobo Castle	Major J. Ainslie	5	1 0	594	34·9	45·64	238	194
Peebles (Hydro.)	R. Turner, Esq., O.B.E. ..	5	0 9	700	..	38·65	..	..
D West Linton (Woodlea Cottage)	Messrs. Leslie & Reid, C.E.	5	1 0	801	..	40·68	246	190
D West Linton (Taieri)	W. Mackie, Esq.	5	1 0	770	..	44·49	285	198
3.—ESK. 23 sq. mi.								
D Eddlestone (Portmore Res.) ...	Messrs. Leslie & Reid, C.E.	11	1 0	1000	..	42·46	264	196
4.—CLYDE—Right Bank Tributaries. 6 sq. mi.								
BERWICK. (Area, 457 sq. mi.)								
1.—TWEED—Gala. 6 sq. mi.								
2.—TWEED—Leader. 92 sq. mi.								
D Earlston (Cowdenknowes)	Mr. T. J. Fleming	5	1 2	300	..	37·25	195	162
M Lauder (Burncastle)	J. G. S. Turnbull, Esq.	5	1 0	900	..	38·32 ?	..	..
M Earnscleugh Burn (Blythe Rig)	J. G. S. Turnbull, Esq.	5	1 0	1200	..	47·28	..	..
3.—TWEED. LOWER—Left Bank Tributaries. 115 sq. mi.								
Coldstream (Lochton)	J. Aitchison, Esq.	5	1 0	151	..	26·94	..	..
d Coldstream School	J. Campbell Hardie, Esq. .	5	1 0	100	..	25·41	(188)	(140)
D Coldstream (The Hirsel)	Mr. D. Black	5	1 4	130	25·6	24·72	192	140
D Swinton House (*Snowdon*) (+ A)	Rev. A. E. Swinton	5	1 0	200	..	27·42	214	148

DIVISION XIII.—SOUTH-EASTERN COUNTIES—(*con.*).

STATIONS.	AUTHORITIES.	Rain-gauge: Diam.	Height of Rim above Ground.	Height of Ground above Sea Level.	Average Rainfall.	1928: Rainfall.	Days with ·01 in. or more.	Days with ·04 in. or more.
BERWICK—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
4.—TWEED—Whiteadder. 164 sq. mi.								
D Marchmont House	Mr. Peter Ross	5	1 0	498	32·2	36·05	241	173
D Duns (Nisbet House Gdns.)	Mr. W. Cowieson	5	1 0	290	..	33·10	230	165
D Duns (Oxendean)	A. C. Fraser, Esq.	8	0 7	600	..	37·24	220	162
D Duns Castle	F. S. Hay, Esq.	5	1 0	500	..	35·27	228	161
D Duns (Manderston)	Mr. F. J. Marshall	5	1 6	356	..	33·57	187	157
5.—EAST COAST STREAMS. 80 sq. mi.								
St. Abb's Head	Com'rs. of N. Lighthouses	8	5 6	212	23·6	28·84	..	..
HADDINGTON. (Area, 267 sq. mi.)								
1.—TWEED—Leader. 1 sq. mi.								
2.—TWEED—Whiteadder. 35 sq. mi.								
3.—EAST COAST STREAMS. 69 sq. mi.								
M Garvald (Donolly Reservoir)	A. Robertson, Esq., C.E.	5	1 0	500	..	32·17	..	..
M Garvald (Thorter Reservoir)	A. Robertson, Esq., C.E.	5	1 0	700	..	33·03	..	..
Barnsness Lighthouse	Com'rs. of N. Lighthouses	5	1 2	20	..	22·52 ?	167	126
D Dunbar (Belhaven Hill)	W. Ingham, Esq.	..	..	..	..	26·61	217	148
4.—TYNE & C. 114 sq. mi.								
W Lammermuir H. (West Hopes)	J. Ross, Esq., C.E.	5	1 0	736	..	40·67	..	..
W LammermuirH.(StobshielRes.)B	J. Ross, Esq., C.E.	5	1 0	950	..	40·31	..	..
W LammermuirH.(Stobshiel Res.)A.	J. Ross, Esq., C.E.	5	1 0	998	..	34·11	..	..
W LammermuirH.(LammerlochRes.)	J. Ross, Esq., C.E.	5	1 0	900	..	36·57	..	..
d Lammermuir H. (Stobshiel Fil.)	J. Ross, Esq., C.E.	5	1 0	650	..	31·33 ?	..	..
D Prestonkirk (Smeaton)	Sir A. Buchan-Hepburn, Bt.	5	1 0	100	24·9	27·40	184	152
5.—FIRTH OF FORTH. 48 sq. mi.								
D East Fortune Sanatorium	The Clerk of Works	5	1 4	101	..	26·95	163	141
D Dirleton	W. S. Curr, Esq.	5	1 6	149	..	24·24	172	119
D North Berwick Reservoir	A. Robertson, Esq., C.E.	5	1 6	150	25·4	27·62	207	148
D North Berwick (Hospital)	A. Robertson, Esq., C.E.	5	1 0	152	..	25·47	193	132
6.—INSULAR.								
Fidra	Com'rs. of N. Lighthouses	..	..	..	..	21·77 ?	..	113
MIDLOTHIAN. (Area, 369 sq. mi.)								
1.—TWEED—Gala. 68 sq. mi.								
M Stow (Cragdale)	J. Pringle, Esq.	5	0 6	642	..	43·50	..	..
2.—TYNE. 28 sq. mi.								
D Oxenford Castle Gardens	Mr. D. M. Welsh	5	1 2	452	..	28·62	172	146
3.—FIRTH OF FORTH. 3 sq. mi.								
4.—ESK. 116 sq. mi.								
M Moorfoot Hills (Bowbate)	Messrs. Leslie & Reid, C.E.	11	0 6	1260	..	54·72	..	..
D Moorfoot Hills (Gladhouse Res.)	Messrs. Leslie & Reid, C.E.	5	0 8	915	35·3	40·66	256	198
D Moorfoot Hills (Rosebery)	Messrs. Leslie & Reid, C.E.	4	0 9	750	..	35·99	235	179
D Moorfoot Hills (Edgelaw)	Messrs. Leslie & Reid, C.E.	4	0 10	654	..	35·26	236	178
D Gorebridge (Deanbank)	A. Wilson Spalding, Esq.	5	1 0	500	..	37·04	281	184
M Pentland Hills (Harehill)	Messrs. Leslie & Reid, C.E.	11	1 7	1297	..	45·47	..	..
D Pentland Hills (Martyrs Cross)	Messrs. Leslie & Reid, C.E.	5	1 0	750	..	41·98	247	187
D Pentland Hills (Loganlea)	Messrs. Leslie & Reid, C.E.	5	1 0	811	..	42·48	223	178

DIVISION XIII.—SOUTH-EASTERN COUNTIES—(*con.*).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge Height of Rim above Ground.	Rain-gauge Height of Ground above Sea Level.	Average Rainfall.	1928 Rainfall.	1928 Days with ·01 in. or more.	1928 Days with ·04 in. or more.
MIDLOTHIAN—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
4.—ESK—(*con.*)								
D Pentland Hills (Glencorse Fil.)	Messrs. Leslie & Reid, C.E.	5	1 0	638	..	38·95	229	182
D Pentland Hills (Glen Cottage)	Messrs. Leslie & Reid, C.E.	5	1 2	739	..	44·57	229	190
D Newbattle (Public School)	W. Fowler, Esq.	5	4 3	300	..	31·77	192	153
5.—ALMOND & C. 153 sq. mi.								
D Pentland Hills (Crosswood)	Messrs. Leslie & Reid, C.E.	5	1 0	950	..	47·02	268	202
D Pentland Hills (Harperrig)	Messrs. Leslie & Reid, C.E.	5	1 0	900	..	49·59	263	192
D Pentland Hills (Morton)	Messrs. Leslie & Reid, C.E.	5	1 0	749	..	44·67	268	188
D West Calder (Addiewell)	Scottish Oils, Ltd.	12	21 0	620	35·7	45·48	219	168
D Pentland Hills (Boghall)	(+A) College of Agriculture	8	1 0	646	..	37·33	225	166
D Pentland Hills (Harlaw Res.)	Messrs. Leslie & Reid, C.E.	5	1 0	800	..	38·95	234	175
M Pentland Hills (Bonally Res.)	Messrs. Leslie & Reid, C.E.	11	0 6	1112	..	40·60	..	..
D Pentland Hills (Clubbiedean Rs.)	Messrs. Leslie & Reid, C.E.	4	0 6	773	..	36·96	243	168
M Pentland Hills (Swanston)	Messrs. Leslie & Reid, C.E.	5	0 6	550	..	37·08	..	..
D Pentland Hills (Fairmilehead)	Messrs. Leslie & Reid, C.E.	5	1 0	590	..	35·29	224	160
D Liberton (Alnwick Hill)	Messrs. Leslie & Reid, C.E.	5	1 0	407	..	33·41	210	154
D Colinton (Firhill Tank)	Messrs. Leslie & Reid, C.E.	5	0 6	412	..	33·47	239	153
D Liberton (College Garden)	College of Agriculture	5	1 0	190	..	34·30	213	157
D Liberton (The Inch)	(R) Sir R. G. Gilmour, Bart.	8	2 9	60	..	29·40	210	142
D Edinburgh (Royal Observatory)	Prof. R. A. Sampson, F.R.S.	8	1 0	441	24·7	33·09	221	156
D Edinburgh (Napier Road)	A. Harrison, Esq.	5	1 0	300	..	30·67	212	143
D Edinburgh (The Academy)	M. McC. Fairgrieve, Esq.	5	1 0	70	..	31·02	221	149
D Edinburgh (Univ. Engin. Lab.)	Prof. Sir T. Hudson Beare	5	1 0	227	26·0	30·49	206	148
D Edinburgh (St. Roque)	Mr. H. B. Waugh	5	0 10	270	..	31·76	218	149
D Edinburgh (City Observatory)	J. McDougal Field, Esq.	8	1 0	348	..	30·45	232	141
D Edinburgh (Royal Botanic Gd.)	Prof. W. Wright-Smith	8	0 10	74	..	29·91	193	153
D Davidson's Mains (Broomfield)	J. I. Balfour-Melville, Esq.	5	0 10	42	..	29·23	193	160
6.—CLYDE—Right Bank Tributaries. 1 sq. mi.								
LINLITHGOW. (Area, 120 sq. mi.)								
1.—ALMOND & C. 60 sq. mi.								
M Uphall No. 7	Messrs. Leslie & Reid, C.E.	8	1 4	790	..	43·90	..	..
M Uphall No. 8	Messrs. Leslie & Reid, C.E.	8	1 4	577	..	43·60	..	..
M Uphall No. 6	Messrs. Leslie & Reid, C.E.	8	1 4	680	..	43·68	..	..
M Uphall No. 3	Messrs. Leslie & Reid, C.E.	8	1 2	711	..	42·99	..	..
D Uphall (Bangour Asylum)	Col. J. Keay, M.D.	5	1 0	587	..	41·31	249	181
d Uphall	Scottish Oils, Ltd.	8	0 10	380	..	40·60	..	..
Winchburgh (Hopetoun Oil Wks.)	Scottish Oils, Ltd.	8	7 10	319	..	33·51	..	..
D Dalmeny House	Mr. D. T. Johnston	5	1 0	50	..	33·49	205	156
2.—FORTH—Right Bank Tributaries. 59 sq. mi.								
D Bathgate (Filters) No. 1	A. L. Reid, Esq.	5	0 9	640	..	41·75	219	172
M Bathgate (Petershill Res.) No. 2	A. L. Reid, Esq.	5	0 9	710	..	38·28	..	..
M Bathgate (Ballencrieff R.) No. 3	A. L. Reid, Esq.	5	0 9	800	..	39·72	..	..
M Torphichen (Lochcote)	Wm. Beattie, Esq.	5	0 4	550	..	44·50	..	..
D Uphall (Beecraigs)	Messrs. Leslie & Reid, C.E.	..	..	531	..	43·98	229	184
M Carribber Reservoir	Wm. Beattie, Esq.	5	0 4	400	..	43·25		
D Linlithgow (Grange)	H. M. Cadell, Esq.	5	0 9	430	..	41·06	226	174
D Linlithgow (Preston House)	Mr. C. Blair	5	1 0	380	..	44·84	228	195
D Linlithgow Academy	J. Beveridge, Esq.	5	1 0	170	..	46·14	240	179
Bo'ness (Neidpath)	R. Stark, Esq.	5	1 10	205	..	42·79	..	..
Bo'ness (Grange School)	R. Stark, Esq.	5	0 10	80	..	41·49	..	..
3.—CLYDE.—Right Bank Tributaries. 1 sq. mi.								

DIVISION XIV.—SOUTH-WESTERN COUNTIES.

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge: Height of Rim above Ground.	Rain-gauge: Height of Ground above Sea Level.	Average Rainfall.	1928: Rainfall.	1928: Days with ·01 in. or more.	1928: Days with ·04 in. or more.
LANARK. (Area, 881 sq. mi.)		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
1.—TWEED, UPPER—Left Bank Tributaries. 20 sq. mi.								
2.—ALMOND. 14 sq. mi.								
3.—FORTH—Right Bank Tributaries. 9 sq. mi.								
D Airdrie (Forrestburn Reservoir)	A. Simpson, Esq., C.E.	5	0 6	722	31·80	43·24	223	186
4.—CLYDE—Right Bank Tributaries. 378 sq. mi.								
D Crawford (Camps Res.)	Jas. McMillan, Esq.	11	0 10	969	..	64·01	221	202
M Coulter Reservoir No. 1	L. Costley, Esq., C.E.	11	1 0	1250	..	67·50	..	..
Lamington (Cowgill Reservoir)	J. Chisholm, Esq., C.E.	5	1 0	1012	..	45·67	..	..
D Biggar (Shieldhill)	Miss Dunlop	5	1 0	850	..	41·67	251	193
D Lamington House	Rt. Hon. Lord Lamington.	5	1 0	800	..	53·31	253	212
Carluke (Coldstream Reservoir)	L. Costley, Esq., C.E.	11	1 0	800	..	45·80	..	..
Wishaw (Kirk Road)	J. Y. Scott, Esq.	6	1 0	480	..	39·08	..	..
Wishaw (Coronation Street)	A. Hinshelwood, Esq.	5	1 3	510	..	37·66	..	..
Glasgow (Tollcross Park)	W. Besant, Esq.	5	0 6	85	..	46·70	241	196
Glasgow Green	W. Besant, Esq.	5	0 6	35	..	48·82	247	190
Glasgow (Alexandra Park)	W. Besant, Esq.	5	0 6	141	..	44·70	241	185
D Glasgow (Riddrie)	K. McKenzie Topping, Esq.	5	1 0	252	..	47·68	239	176
Glasgow (Botanic Gardens)	W. Besant, Esq.	5	0 6	110	..	47·67	232	179
D Glasgow University	Prof. J. R. Currie, M.D.	8	1 0	139	..	45·77	227	174
Glasgow (Kelvingrove Park)	W. Besant, Esq.	5	0 6	48	..	47·55	201	192
Glasgow (Victoria Park)	W. Besant, Esq.	5	0 6	30	..	46·33	226	185
Glasgow (Ruchill Park)	W. Besant, Esq.	5	0 6	222	..	45·27	229	175
Glasgow (Springburn Park)	W. Besant, Esq.	5	0 6	352	..	49·35	255	198
Clarkston (Roughrigg Res.)	J. Chisholm, Esq., C.E.	5	1 0	661	..	38·81	..	..
D Airdrie (Broomknoll Street)	J. Chisholm, Esq., C.E.	5	1 0	402	..	41·89	227	177
D Gartcosh (Gartloch Hospital)	Mr. James McEwen	5	1 1	291	..	46·33	247	186
5.—CLYDE—Left Bank Tributaries. 448 sq. mi.								
Elvanfoot (Potrenick Burn)	L. Costley, Esq., C.E.	11	1 0	1018	..	86·60	..	..
Elvanfoot (Peden Reservoir)	L. Costley, Esq., C.E.	11	1 0	1030	..	85·00	..	..
D Douglas (Kilncroft)	The Earl of Home	8	1 1	696	..	58·41	245	195
D Strathaven (Glengavel Res.)	J. McMillan, Esq., C.E.	5	1 0	880	..	58·52	250	206
D Strathaven (Dungavel)	A. K. Foulis, Esq.	5	1 0	798	..	68·27	239	206
D Strathaven (Dunside Res.)	J. McMillan, Esq., C.E.	5	0 10	1010	..	60·97	246	196
d Strathaven (Kype Res.)	W. H. Purdie, Esq., C.E.	11	3 0	941	..	49·30 ?	..	198
D Coalburn (Acretophead)	C. & A. Collieries, Ltd.	5	0 10	729	..	51·83	239	217
w Lesmahagow (Auchtyfardle)	Major T. E. Lander	5	1 0	578	..	48·42	..	..
D Strathaven (East Overton Ho.)	H. Lee Dykes, Esq.	5	1 0	700	..	55·87	225	202
D Stonehouse Sanatorium	W. A. Chapman, Esq.	5	0 7	526	..	47·87	241	188
D Stonehouse (Glassford Filters)	J. McMillan, Esq., C.E.	5	0 9	775	..	53·14	256	186
D Hamilton W. W. (Townhill)	W. H. Purdie, Esq., C.E.	7	1 0	436	35·6	53·70	247	198
D Hamilton (Scott Street)	S. B. Becket, Esq.	5	1 0	260	..	47·14	242	167
Busby (Thorntonhall)	A. H. Bishop, Esq.	5	1 0	440	..	56·56	249	192
Carmunnock (Carnbooth)	R. Robertson, Esq., C.E.	5	1 0	365	..	52·73	237	188
D Cambuslang (Greenlees Filters)	J. McMillan, Esq., C.E.	5	1 0	322	..	49·08	241	189
D Glasgow (Dumbreck)	W. Gillies, Esq., Jr., LL.B.	5	1 6	76	..	48·31	240	174
Glasgow (Bellahouston Park)	W. Besant, Esq.	5	0 6	160	..	45·77	243	196
Glasgow (Elder Park)	W. Besant, Esq.	5	0 6	40	..	49·33	227	183
6.—IRVINE. 2 sq. mi.								
7.—AYR. 1 sq. mi.								
8.—NITH. 2 sq. mi.								
9.—ANNAN. 7 sq. mi.								

DIVISION XIV.—SOUTH-WESTERN COUNTIES—(*con.*).

STATIONS.	AUTHORITIES.	Rain-gauge: Diam.	Height of Rim above Ground.	Height of Ground above Sea Level.	Average Rainfall.	1928: Rainfall.	Days with ·01 in. or more.	Days with ·04 in. or more.
AYR. (Area, 1135 sq. mi.)		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
1.—CLYDE—Left Bank Tributaries. 20 sq. mi.								
D Glengarnock (Chemical Works)	A. Shanks, Esq.	8	15 0	105	..	65·80	238	197
2.—FIRTH OF CLYDE. 60 sq. mi.								
D Stevenston (Greenhead Filters)	Gilbert Christie, Esq., C.E.	5	1 0	186	..	48·88	238	187
D West Kilbride (Hunterston)	Lt.-Gen. Sir A. Hunter-Weston, K.C.B.	5	1 0	100	..	56·11	223	193
D Skelmorlie (West Park)	J. Wilkinson, Esq.	5	1 6	150	..	68·85	232	212
W Shaws W.W. (Kelly Dam)	J. MacAlister, Esq., C.E.	6	1 0	640	64·1	85·40	..	..
M Shaws W.W. (Knockencorsan)	J. MacAlister, Esq., C.E.	6	1 0	1040	..	94·20	..	..
3.—IRVINE & C. 283 sq. mi.								
D Monkton (Orangefield)	H. Carrick Webster, Esq.	5	1 0	30	..	36·70	199	160
D Dundonald (Goodham)	Jas. Mc Gran, Esq.	12	4 0	270	..	47·42	220	180
Troon (Collenan Reservoir)	M. S. Brodie, Esq., C.E.	5	1 0	203	..	38·55	..	..
D Irvine (Gailes)	H. W. Aitken, Esq.	5	1 0	12	..	47·73	236	184
D Kilmarnock (Agricultural Coll.)	The Principal	8	1 2	90	37·3	49·12	224	183
D Galston Higher Grade School	The Headmaster	5	1 0	250	..	42·55	238	179
D Kilmarnock (Kay Park)	W. Dunbar, Esq.	5	4 0	130	..	49·15	225	189
D Kilmarnock (Dean Castle)	A. B. Robertson, Esq.	5	1 0	190	..	55·40	251	207
D Kilmarnock (North Craig Res.)	W. Dunbar, Esq., C.E.	5	1 0	319	41·2	57·65	239	204
D Fenwick (Hareshaw Lodge)	E. Richmond Paton, Esq.	5	0 3	600	..	67·66	232	206
D Fenwick (Amlaird Filters)	W. Dunbar, Esq., C.E.	5	1 0	590	..	58·97	247	204
Fenwick (Burnfoot Res.)	W. Dunbar, Esq., C.E.	5	1 0	507	..	(53·81)	..	..
Craigendunton Reservoir	W. Dunbar, Esq., C.E.	5	1 0	805	..	61·82	..	..
Loch Goin Reservoir	W. Dunbar, Esq., C.E.	5	1 0	865	..	68·71	..	..
D Dalry (Munnoch Reservoir)	Gilbert Christie, Esq., C.E.	5	1 0	325	..	60·92	249	198
D Dalry (Caaf Reservoir)	Gilbert Christie, Esq., C.E.	5	1 3	515	..	62·51	247	201
D Dalry W.W. (Filters)	Mr. W. Wightman	5	1 0	320	..	44·73	236	202
Dalry W.W. (Thirdpart)	Mr. W. Wightman	5	1 0	560	..	61·53	..	..
M Dalry (Camphill Keservoir)	James Lee, Esq., C.E.	12	1 6	611	..	77·30	..	..
D Beith (Filter Station)	W. C. Dale, Esq.	5	1 0	415	..	59·15	233	206
4.—AYR. 222 sq. mi.								
D Ayr Cemetery	J. Young, Esq., C.E.	5	1 0	40	..	46·29	216	194
D Muirkirk (Kaimshill)	Dugald Baird, Esq.	5	2 0	750	..	54·19	245	196
5.—DOON. 119 sq. mi.								
W Loch Finlas	J. Young, Esq., C.E.	5	1 0	849	..	76·84	..	..
D Dalmellington (Mossdale W.W.)	A. S. Glass, Esq.	5	1 0	764	..	49·36	258	208
D Patna (Kerse Filters)	W. Gray, Esq., C.E.	11	1 0	743	..	50·73	252	200
D Ayr (Doonholm)	Col. N. Kennedy, D.S.O.	5	1 0	90	..	47·48	227	197
6.—CULZEAN BAY & C. 32 sq. mi.								
Turnberry Lighthouse	Com'rs. of N. Lighthouses	5	2 6	40	..	42·48	190	179
D Maybole (Culzean Castle Gdns)	Mr. W. J. Orr	8	1 3	138	36·4	49·98	218	177
7.—GIRVAN. 105 sq. mi.								
Girvan (Glendoune Gardens)	Mr. J. Simons	5	0	100	..	53·82	183	..
Loch Bradan	M. S. Brodie, Esq., C.E.	11	1 0	991	..	80·40	..	..
D Maybole (Otterden)	Robert Cross, Esq.	5	1 3	314	..	47·63	225	193
8.—STINCHAR & C. 155 sq. mi.								
D Colmonell (Knockdolian)	Mrs. McConnell	5	1 0	170	44·8	56·45	234	194
D Girvan (Pinmore)	W. McConnell, Esq.	5	0 5	207	49·8	59·90	252	205
D Pinwherry (Alticane)	D. J. W. Gray, Esq.	5	1 0	200	..	66·66	247	204
D Barr (Alton Albany)	Lt.-Cdr. G. Hughes-Onslow, D.S.C.	5	1 6	330	..	55·65	245	206
9.—LOCH RYAN. 12 sq. mi.								
10.—LUCE BAY. 15 sq. mi.								
Ballantrae (Lagafater Lodge)	Cedric R. Boult, Esq.	5	0 11	792	..	83·44	238	219

DIVISION XIV.—SOUTH-WESTERN COUNTIES—(*con.*).

STATIONS.	AUTHORITIES.	Rain-gauge: Diam.	Height of Rim above Ground.	Height of Ground above Sea Level.	Average Rainfall.	1928: Rainfall.	Days with ·01 in. or more.	Days with ·04 in. or more.
AYR—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
11.—CREE. 40 sq. mi.								
12.—DEE. 9 sq. mi.								
13.—NITH. 62 sq. mi.								
D Glen Afton (Ayr Sanator'm)	Dr. E. E. Prest	5	1 0	850	..	71·52	239	208
D New Cumnock (Power Station)	A. L. Begg, Esq.	5	1 0	764	..	65·41	223	189
14.—INSULAR. 1 sq. mi.								
Ailsa Craig	Com'rs. of N. Lighthouses	5	1 0	35	..	35·87	..	..
RENFREW. (Area, 241 sq. mi.)								
1.—CLYDE—Right Bank Tributaries. 3 sq. mi.								
2.—CLYDE—Left Bank Tributaries. 194 sq. mi.								
GorbalsDist.W.W.(NetherCairn)	G. Henshilwood, Esq.,C.E..	12	0 5	700	57·2	64·20	..	..
GorbalsDist.W.W.(Middleton)	G. Henshilwood, Esq.,C.E.,	12	0 5	550	55·8	61·85	..	..
GorbalsDist.W.W.(Ryat Lynn)	G. Henshilwood, Esq.,C.E..	8	0 5	310	49·0	61·55	..	..
GorbalsDist.W.W.(Waulk Glen)	G. Henshilwood, Esq.,C.E..	12	0 5	280	47·2	61·45	..	..
Paisley W.W. (Muirhead)	James Lee, Esq., C.E.	12	1 0	482	..	77·11	..	..
Paisley W.W. (Springside)	James Lee, Esq., C.E.	12	1 0	532	..	86·05 ?	..	..
PaisleyWW(BackThornleymuir)	James Lee, Esq., C.E.	12	1 0	646	50·9	72·61	..	..
Paisley W.W. (Stanely)	James Lee, Esq., C.E.	12	1 0	190	..	57·38	..	..
D Howwood (Midtown House)	Andrew McNab, Esq.	5	1 6	231	..	77·25	221	200
Pollokshaws (Rouken Glen)	W. Besant, Esq.	5	0 6	156	..	56·36	242	190
Glasgow (The Linn Park)	W. Besant, Esq.	5	1 0	180	..	44·51	198	188
D Pollokshaws (Pollok House)	Sir J. Stirling Maxwell, Bt.	5	1 0	50	..	49·78	223	188
D Glasgow (Queen's Park)	W. Besant, Esq.	8	0 9	145	36·1	45·40	230	195
Glasgow (Maxwell Park)	W. Besant, Esq.	5	0 6	69	..	42·57	217	173
D Kilbarchan (Milliken Park)	M. Douglas Anderson, Esq.	5	1 6	75	..	67·61	223	207
D Kilbarchan (Glentyan) .. (R)	R. H. Hunter, Esq.	8	3 9	285	..	68·81	242	205
D Paisley(TheCoatsObservatory)	Observatory Committee ..	8	1 0	106	40·7	57·81	239	189
D Houston Manse	Rev. George Muir	5	1 0	103	..	69·42	240	203
Shaws W.W. (Duchall Moor)	J. MacAlister, Esq., C.E. .	6	1 0	1150	70·7	93·20	..	..
Shaws W.W. (Creuch Hill)	J. MacAlister, Esq., C.E. .	6	1 0	1350	62·9	92·10	..	..
Shaws W.W. (Green Water)	J. MacAlister, Esq., C.E. .	6	1 0	788	68·1	94·30	..	..
D Renfrew Aerodrome .... (+A)	The Meteorological Office..	8	1 0	36	36·4	51·42	224	173
D Kilmacolm W.W.	James Grier, Esq.	5	1 0	600	..	90·63	245	219
D Kilmacolm Village	James Grier, Esq.	5	1 0	300	..	80·79	237	206
Bishopton (Ingliston)	D. Cross, Esq.	5	1 0	195	..	66·06	..	..
Bishopton (Dargavel)	Miss M. A. Maxwell,M.B.E.	5	1 0	33	..	62·63	..	..
D Shaws W.W. (Gryfe Reservoir)	J. MacAlister, Esq., C.E. .	5	1 0	640	65·1	84·35	253	214
D Shaws W.W. (Mansfield)	J. MacAlister, Esq., C.E. .	5	1 0	573	64·5	83·62	253	215
Shaws W.W. (Darndaff Moor)	J. MacAlister, Esq., C.E. .	5	1 0	850	65·7	86·90	..	..
3.—FIRTH OF CLYDE. 34 sq. mi.								
Shaws W.W. (Largs Road)	J. MacAlister, Esq., C.E. .	5	1 0	910	57·0	84·97	..	..
Inverkip (Daff Burn Reservoir)	Alex Duthie, Esq.	8	1 0	506	..	81·78	..	..
M Langbank (East Bank Gardens)	T. Cross, Esq.	5	2 0	250	..	68·52	..	..
W DuglichillFilters(Pt.Glas.W.W.)	James Murray, Esq.	8	1 6	540	..	78·07	..	..
W ParkhillFilters(Pt.Glas.W.W.)	James Murray, Esq.	8	1 6	275	..	72·68	..	..
D Shaws W.W. (Compens. Res.)	J. MacAlister, Esq., C.E.. .	5	1 0	600	64·4	82·21	261	217
D Shaws W.W. (Loch Thom)	J. MacAlister, Esq., C.E. .	5	1 0	643	65·4	85·85	261	218
W Shaws W.W. (Shielhill)	J. MacAlister, Esq., C.E. .	6	1 0	962	65·7	94·40	..	..
D Shaws W.W. (New Yett's Dam)	J. MacAlister, Esq., C.E. .	5	1 0	800	65·0	80·71	286	226
W Shaws W.W. (Spango Burn)	J. MacAlister, Esq., C.E. .	6	1 0	757	65·1	86·80	..	..
D Shaws W.W. (Hole Glen)	J. MacAlister, Esq., C.E. .	5	1 0	603	62·2	85·22	286	227
D Greenock (Prospect Hill) .(+A)	J. MacAlister, Esq., C.E. .	5	1 0	199	61·6	84·95	254	211
D Gourock (Coves Reservoir)	Alex. Duthie, Esq.	5	1 0	221	..	82·03	236	214
4.—IRVINE. 10 sq. mi.								

DIVISION XV.—WEST MIDLAND COUNTIES.

STATIONS.	AUTHORITIES.	Rain-gauge Diam.	Height of Rim above Ground.	Height of Ground above Sea Level.	Average Rainfall.	1928 Rainfall.	Days with ·01 in. or more.	Days with ·04 in. or more.
DUMBARTON. (Area, 270 sq. mi.)		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
1.—FORTH—Right Bank Tributaries. 10 sq. mi.								
2.—FIRTH OF CLYDE & COWAL. 52 sq. mi.								
D Cardross (Kilmahew)	Capt. Claud A. Allan	5	1 0	130	..	63·76	229	212
D Helensburgh (Ferniegair)	J. N. Stirling, Esq., C.E.	8	1 0	21	49·7	72·22	245	214
D Helensburgh (Valve House)	J. N. Stirling, Esq., C.E.	8	1 0	293	..	78·08	251	220
d Rosneath Castle Gardens	Mr. J. M. Urquhart	5	0 4	33	..	72·55	..	..
Garlochhead (Aikenshaw)	W. S. Turnbull, Esq.	6	1 0	32	..	77·50	..	..
D Arrochar (Glen Loin)	Mrs. Little	5	1 0	17	..	129·95	251	230
D Arrochar (Braeside)	J. Lindsay, Esq.	5	1 0	40	..	120·56	272	233
3.—CLYDE—Leven. 149 sq. mi.								
D Renton (Carman Filters)	J. W. Rankine, Esq.	8	4 0	292	..	70·64	221	205
Loch Lomond Park	W. Besant, Esq.	5	1 0	156	..	70·97	262	..
M Glen Finlas Reservoir...	No. 1. George Beaton, Esq.	5	1 1	782	..	98·86	..	..
M Glen Finlas Reservoir...	No. 2. George Beaton, Esq.	5	1 6	1194	..	97·12	..	..
M Glen Finlas Reservoir...	No. 3. George Beaton, Esq.	5	1 5	1627	..	107·47	..	..
M Glen Finlas Reservoir...	No. 4. George Beaton, Esq.	5	2 0	2040	..	105·58	..	..
M Glen Finlas Reservoir...	No. 5. George Beaton, Esq.	5	0 9	1635	..	88·42	..	..
M Glen Finlas Reservoir...	No. 6. George Beaton, Esq.	5	1 0	1172	..	90·67	..	..
D Glen Finlas Reservoir...	No. 7. George Beaton, Esq.	12	1 6	810	..	116·17	246	222
4.—CLYDE—Right Bank Tributaries. 59 sq. mi.								
D Drumchapel (Wasdale)	F. C. Thomson, Esq.	5	1 0	49	..	52·14	250	189
W Bearsden (Glengarnock)	A. Lithgow, Esq.	8	1 0	132	..	53·36	..	..
D Milngavie (Dougalston)	Mr. J. Hamilton	5	1 0	150	43·7	54·14	240	207
D Duntocher (Cochno Filters)	E. T. Collins, Esq., C.E.	5	1 0	400	..	56·58	211	203
Kilpatrick Hills (Greenside Res.)	E. T. Collins, Esq., C.E.	5	1 0	876	..	75·92	..	..
Kilpatrick Hills (Loch Cochno)	E. T. Collins, Esq., C.E.	5	1 0	909	..	76·26	..	..
Kilpatrick Hills (Jaw Reservoir)	E. T. Collins, Esq., C.E.	5	1 0	912	..	73·18	..	..
STIRLING. (Area, 463 sq. mi.)								
1.—FORTH—Right Bank Tributaries. 263 sq. mi.								
D Polmont (Vellore)	R. M. W. Brown, Esq.	8	1 0	320	..	47·30	222	182
D Falkirk (Inglewood, Laurieston) late W. Ballantine, Esq.		5	1 3	133	..	48·76	203	180
D Falkirk (Westbank)	*Garden*. A. Nimmo, Esq.	5	1 0	75	..	49·44	233	177
M Falkirk (Westbank)	*Lawn*. A. Nimmo, Esq.	5	1 0	105	..	47·80	..	..
D Falkirk (Arnotdale)	W. Gibson, Esq.	5	1 0	107	..	49·54	240	180
Falkirk (Kerse)	George Smith, Esq.	5	1 0	18	31·9	44·42	..	..
d Grangemouth (Burgh Stables)	J. C. Wallace, Esq., C.E.	5	1 0	15	..	45·22	..	150
Little Denny Reservoir	C. Massie, Esq., C.E.	8	1 0	326	..	57·94	..	..
Little Denny Filters	C. Massie, Esq., C.E.	8	1 0	243	..	58·37	..	..
Kilsyth (Faughlin Res.)	C. Massie, Esq., C.E.	8	1 0	707	..	82·23	..	..
Denny (Buckieburn Reservoir)	C. Massie, Esq., C.E.	8	1 0	825	..	63·23	..	..
Denny (Buckieburn Filters)	C. Massie, Esq., C.E.	8	1 0	760	..	59·92	..	..
Earlsburn Reservoir	C. Massie, Esq., C.E.	8	1 0	1202	..	88·77	..	..
D Stirling (North Third Res.)	J. C. Wallace, Esq., C.E.	8	1 0	560	..	67·19	250	213
D Stirling (Touch Res.)	No. 3A. H. Goudie, Esq.	8	1 0	759	..	71·63	241	201
D Stirling (Touch Res.)	No. 2A. H. Goudie, Esq.	8	1 0	707	..	70·02	242	200
D Stirling (Touch Res.)	No. 1A. H. Goudie, Esq.	8	1 0	455	..	73·53	242	200
Stirling (Deroran)	C. A. Buchanan, Esq.	5	1 0	136	..	62·08	..	..
D Stirling (Sauchie House)	J. Fyfe, Esq., C.S.I.	5	1 0	151	..	54·01	221	169
Stirling (Westerlands)	J. W. Drummond, Esq.	5	1 0	120	..	54·69	..	..
D Stirling (Craigforth)	A. J. Couper, Esq.	5	0 6	32	..	56·43	272	174
D Gargunnock House	C. Stirling, Esq.	5	1 0	85	..	68·81	221	180
D Kippen (Arngomery)	Mr. P. McCowan	5	4 6	150	..	66·34	206	194
W Duchray Valley (Ben Lomond)	G. Henshilwood, Esq., C.E.	8	0 6	1500	..	123·05	..	..
d Duchray Valley (Glen Dhu)	G. Henshilwood, Esq., C.E.	8	1 0	500	..	122·10	..	223
d Duchray Valley (Comer)	G. Henshilwood, Esq., C.E.	8	1 0	600	..	123·20	..	224
W Duchray Valley (Achaidh Burn)	G. Henshilwood, Esq., C.E.	8	1 0	1200	..	132·20	..	..
W Duchray Val. (Hd. of Main Stream)	G. Henshilwood, Esq., C.E.	8	1 0	950	..	126·85	..	..

DIVISION XV.—WEST MIDLAND COUNTIES—(*con.*).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge Height of Rim above Ground.	Rain-gauge Height of Ground above Sea Level.	Average Rainfall.	1928 Rainfall.	1928 Days with ·01 in. or more.	1928 Days with ·04 in. or more.
STIRLING—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
2.—FORTH—Teith. 5 sq. mi.								
d Stronachlachar (Invergyle)	G. Henshilwood, Esq., C.E.	8	1 0	376	..	119·65	..	235
3.—FORTH—Left Bank Tributaries. 15 sq. mi.								
D Bridge of Allan (The Lea)	Mr. W. Watt	5	0 8	50	..	49·60	245	181
4.—CLYDE—Leven. 128 sq. mi.								
Strathblane (Blanefield)	G. Henshilwood, Esq., C.E.	8	1 0	250	50·5	73·90	..	..
d Killearn (Achnagowan)	Miss A. L. Guthrie-Smith	5	1 0	332	..	83·82	..	211
w Loch Arklet (Corriehichon)	G. Henshilwood, Esq., C.E.	8	0 6	870	89·3	119·30	..	..
w Loch Arklet (Corriearklet)	G. Henshilwood, Esq., C.E.	8	0 6	950	90·2	120·40	..	..
5.—CLYDE—Right Bank Tributaries. 52 sq. mi.								
Strathblane (Mugdock Res.)	G. Henshilwood, Esq., C.E.	8	0 6	320	46·2	65·65	..	..
D Milngavie (Eastertoun)	Major R. M. Ker	5	1 0	474	..	63·90	229	193
Kilpatrick H. (BurncrooksRes.)	E. T. Collins, Esq.	5	1 0	835	..	72·15	..	..
D Kilsyth (Innsbridge)	J. I. Little, Esq.	5	4 6	197	..	63·97	252	209
BUTE. (Area, 218 sq. mi.)								
1.—ISLE OF BUTE. 50 sq. mi.								
D Rothesay (Ardencraig)	Sir John Reid	5	1 0	200	49·0	72·72	268	234
D Port Bannatyne (Ettrickdale)	Lt.-Col. M.R.GrayBuchanan	5	1 0	160	..	67·25	247	210
2.—CUMBRAES. 4 sq. mi.								
D Millport (Marine Biog. Stat.)	R. Elmhirst, Esq.	5	1 0	16	..	54·62	223	202
3.—ARRAN. 164 sq. mi.								
Pladda	Com'rs. of N. Lighthouses.	5	1 6	53	43·5	32·65 ?	..	..
Holy Island (Pillar Rock)	Com'rs. of N. Lighthouses.	5	0 11	68	..	44·67	214	190
D Dougarie Lodge	David Reside, Esq.	5	1 0	10	..	61·97	227	205
D Corrie Manse	Rev. James Brown	5	1 0	20	..	99·61	238	204
ARGYLL. (Area, 3181 sq. mi.)								
1.—TAY Tummel. 36 sq. mi.								
2.—SOUND OF ARISAIG, SOUND OF MULL & C. 317 sq. mi.								
D Morvern (Ardtornish)	G. Craig Sellar, Esq.	5	1 0	48	..	111·58	255	232
Ardnamurchan Lighthouse	Com'rs. of N. Lighthouses.	5	0 9	79	43·4	41·67 ?	218	181
D Morvern (Drimnin)	Mrs. Gordon	5	1 0	225	..	69·23	268	218
D Loch Sunart (Glenborrodale)	A. M. Fletcher, Esq.	5	1 0	..	69·0	76·01	269	238
D Acharacle (Shielbridge)	A. M. Fletcher, Esq.	8	1 0	48	..	80·45	245	222
d Loch Shiel (Polloch House)	Forestry Commission	5	0 9	30	..	111·80	..	193
3.—LOCH LINNHE—Right Bank Tributaries. 139 sq. mi.								
D Morvern (Kingairloch)	Late G. Herbert Strutt, Esq.	5	1 0	40	..	125·17	222	214
Corran Lighthouse	Com'rs. of N. Lighthouses.	5	1 0	13	81·0	100·56	224	217
D Ardgour House	Maclean of Ardgour	5	0 10	60	..	117·66	261	230
4.—LOCH LINNHE.—Left Bank Tributaries. 165 sq. mi.								
D Duror (Achara)	W. D. Stewart, Esq.	5	1 2	45	..	84·38	226	204
D Barcaldine	S. H. R. Paterson, Esq.	5	1 0	50	..	81·54	226	204
D Barcaldine Gardens	Sir Charles Stewart, K.B.E.	5	1 0	50	..	92·46	258	215
D Duror (The Rectory)	Rev. Canon E. J. Benwell	5	1 0	120	..	90·95	237	213
Glenleven (BlackwaterHouse)	4British Aluminium Co. Ltd.	8	1 0	1069	..	113·14	..	..
D Glenleven(BlackwaterDam,S.)	2British Aluminium Co. Ltd.	8	1 0	1072	..	121·20	268	228
D Glenleven (Kinlochleven)	1British Aluminium Co. Ltd.	8	1 0	140	..	119·07	238	228

DIVISION XV.—WEST MIDLAND COUNTIES—(*con.*).

STATIONS.	AUTHORITIES.	Rain-gauge Diam.	Height of Rim above Ground.	Height of Ground above Sea Level.	Average Rainfall.	1928 Rainfall.	1928 Days with ·01 in. or more.	1928 Days with ·04 in. or more.
ARGYLL—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
5.—LOCH ETIVE. 197 sq. mi.								
D Glen Etive	W. D. Fordyce, Esq.	5	1 0	200	..	122·07	223	219
6.—LOCH ETIVE—Loch Awe. 319 sq. mi.								
D Loch Awe (Ford)	H. Cameron, Esq.	8	1 0	49	..	77·75	233	221
D Dalmally (Manse of Glenorchy)	Rev. Farquhar MacRae	5	1 0	150	..	100·58	246	221
D Bridge of Orchy (Inveroran)	G. Wishart, Esq., C.E.	5	1 0	580	..	109·31	228	215
7.—FIRTH OF LORNE. 112 sq. mi.								
D Kilmelfort (Arduaine)	J. A. Campbell, Esq.	5	0 10	23	..	80·98	216	207
D Kilmelfort (Ardmaddy Castle)	Marchioness of Breadalbane	5	..	..	..	78·28	248	219
W Oban (Gleann-a-Bhearraidh Res.)	D. Galloway, Esq.	8	1 6	370	..	77·76	..	..
D Oban	D. Galloway, Esq.	8	1 0	21	..	68·84	232	204
8.—SOUND OF JURA. 163 sq. mi.								
D Lochgilphead (Poltalloch)	Mr. D. S. Melville	5	1	135	52·7	66·88	236	215
9.—KINTYRE, WEST. 146 sq. mi.								
Mull of Kintyre	Com'rs. of N. Lighthouses.	5	1 0	270	41·8	53·94	..	
D Muasdale (Grianan)	Rev. D. J. Macdonald	5	1 0	10	..	60·11	241	208
D Largie Castle	Mrs. Moreton Macdonald	5	1 1	160	..	61·65	251	214
D Carse	J. Birkmyre, Esq.	5	1 6	20	..	53·37	231	201
10—KINTYRE, EAST. 177 sq. mi.								
D Campbeltown (South Park)	J. A. Gardiner, Esq.	8	0 10	20	..	67·85	250	203
Campbeltown (Devaar)	Com'rs. of N. Lighthouses.	5	1 9	76	45·1	62·71	216	196
D Carradale (Torrisdale Castle)	Major W. Macalister Hall	5	1 0	84	..	87·34	244	219
d Skipness Castle	R. F. Graham, Esq.	5	1 1	14	48·8	(63·52)	..	..
11.—LOCH FYNE. 264 sq. mi.								
D Ardlamont (Kilbride)	J. W. Turnbull, Esq.	5	1 0	110	..	66·32	230	194
Otter Ferry (Ballimore)	Lt.-Col. MacRae-Gilstrap	5	0 10	70	..	67·13	..	..
D Ardrishaig (Canal Office)	E. A. Bly, Esq., C.E.	5	1 0	48	..	82·16	248	211
B Loch Fyne (Castle Lachlan)	The Maclachl'n of Machlachl'n	5	1 0	25	..	93·01	255	232
D Crarae Lodge	Sir Archibald Campbell, Bt.	5	1 0	20	..	84·59	249	228
D Strachur Park	Lady G. Campbell	5	1 0	25	..	91·36	247	231
D Inveraray Castle Gardens	A. R. Page, Esq.	5	1 0	40	77·2	108·04	233	222
D Ardkinglas	Mr. J. Payne	8	1 6	37	..	102·67	248	227
12.—FIRTH OF CLYDE & COWAL. 242 sq. mi.								
D Toward (Knockdow Gardens)	Sir Norman Lamont, Bt.	5	1 6	101	..	81·14	243	227
D Tighnabruaich (Wellpark)	R. Paton, Esq.	12	5 2	50	..	74·17	263	241
D Toward (Inverchaolain)	Sir Norman Lamont, Bt.	5	1 0	..	..	85·17	242	226
D Dunoon (Reservoir)	W. Rodger, Esq., C.E.	12	3 6	245	..	111·17	212	208
D Dunoon (Redhurst)	Dr. J. Banks	5	1 0	60	..	110·58	237	218
D Ardnadan (Hafton Ho.)	Alex. McLeod, Esq.	5	1 0	73	..	105·41	252	214
B Loch Eck (Benmore)	H. G. Younger, Esq.	5	1 3	40	86·6	123·97	254	233
D Glenbranter	Forestry Commission	5	1 0	188	..	117·77	253	225
Lochgoilhead (Ardgoil)	W. Besant, Esq.	5	0 6	20	..	116·64	238	222
D Lochgoilhead (Nuthill)	Mrs. Henderson	5	1 0	15	..	104·61	237	228
d Glencroe (Guithas Cottage)	D. Spraggan, Esq.	5	1 2	120	..	(126·03)	..	..
13.—CLYDE—Leven. 4 sq. mi.								

DIVISION XV.—WEST MIDLAND COUNTIES—(*con.*).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge Height of Rim above Ground.	Rain-gauge Height of Ground above Sea Level.	Average Rainfall.	1928 Rainfall.	1928 Days with ·01 in. or more.	1928 Days with ·04 in. or more.
ARGYLL—(*con.*)		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
14.—INSULAR. 900 sq. mi.								
D Islay (Ardbeg)	A. H. MacDougall, Esq....	5	7 0	46	45·1	57·98	254	212
Sanda Lighthouse	Com'rs. of N. Lighthouses.	5	2 9	134	..	49·46	212	187
Islay (Rhinns)	Com'rs. of N. Lighthouses.	7	3 6	74	35·5	48·41 ?	225	201
Islay (Lochindaul)	Com'rs. of N. Lighthouses.	5	0 7	45	44·2	55·18	..	198
Islay (McArthur's Head)	Com'rs. of N. Lighthouses.	5	0 6	173	53·5	82·56	238	221
D Islay (Eallabus)	James MacKillop, Esq. ...	5	1 0	68	48·9	72·06	258	230
d Islay (Dunlossit)	N. Dunlop, Esq.	5	1 0	100	..	64·49	..	206
d Islay (Cluanach	N. Dunlop, Esq.	5	0 11	150	..	61·02	..	211
Islay (Rhuvaal)	Com'rs. of N. Lighthouses.	5	1 0	69	..	49·36 ?	..	191
D Jura (Ardfin)	Colin Campbell, Esq.	5	1 0	160	..	80·56	254	240
Lismore (Mousedale)	Com'rs. of N. Lighthouses.	7	3 10	38	43·7	54·58	207	191
D Eriska	Mr. J. M. Webster	5	1 6	40	..	67·82	..	..
D Mull (Iona Manse)	Rev. A. Macmillan	5	1 2	45	..	54·09	216	199
D Mull (Bunessan)	Duncan Cameron, Esq. ...	5	1 0	50	..	62·00	242	219
D Mull (Lochbuie House)	Sir R. Garton, Bart.	5	1 3	..	..	105·44	211	208
D Mull (Kinlochspelvie)	G. W. Duncan, Esq.	8	1 6	50	..	109·84	227	226
Mull (Benmore)	The Meteorological Office..	5	2 0	2800	..	(160·80)	..	..
D Mull (Glencannel)	Duncan Cameron, Esq. ...	5	1 3	140	..	127·67	260	233
D Mull (Ulva)	F. W. Clark, Esq.	5	1 0	30	63·9	74·77	263	222
d Mull (Knock)	John Cameron, Esq.	5	1 3	50	..	106·26	..	214
D Mull (Gruline)	J. W. Melles, Esq.	8	1 0	101	..	95·42	265	232
Mull, Sound of	Com'rs. of N. Lighthouses.	..	..	..	60·1	74·18	245	215
Fladda Lighthouse	Com'rs. of N. Lighthouses.	5	1 6	25	..	70·87	232	214
D Tiree (Hynish House)	M. Maclean, Esq.	5	1 2	65	..	46·37	257	205
D Tiree (Cornaigmore School)	Meteorological Office	5	1 0	22	..	50·58	236	193

DIVISION XVI.—EAST MIDLAND COUNTIES.

CLACKMANNAN. (Area 55 sq. mi.)

1.—FORTH, LOWER—Left Bank Tributaries. 55 sq. mi.

d Alloa House Gardens	Earl of Mar & Kellie, K.T.	5	3 0	40	..	48·00	..	..
W Alloa W. W. (Gartmorn Res.)	Robert Cairns, Esq., C.E. .	11	1 0	172	..	44·70	..	..
D Dollar (Dollarbeg)	James Bleloch, Esq.	5	0 9	300	..	48·94	246	182
D Tillicoultry (Westbourne)	Mrs. Willison	5	1 0	66	..	47·20	225	188
M Glendevon	No. 2 H. F. Hodge, Esq., C.E. ..	8	1 0	1333	..	101·99	..	..
M Glendevon	No. 8 H. F. Hodge, Esq., C.E. ..	8	1 0	1721	..	67·01 ?	..	..
M Glendevon	No. 9 H. F. Hodge, Esq., C.E. ..	8	1 0	1067	..	83·71	..	..
D Glendevon (Backhill)	H. F. Hodge, Esq., C.E. ..	8	1 0	1067	..	84·34	258	216

KINROSS. (Area, 87 sq. mi.)

1.—FORTH, LOWER—Left Bank Tributaries. 15 sq. mi.

D Dollar (Blairingone Manse)	Rev. J. F. Cameron	5	1 6	296	39·8	50·95	230	193

2.—LEVEN & C. 67 sq. mi.

D Loch Leven Sluice	Mr. J. Thomson.....	8	0 9	306	35·8	44·74	211	171
D Milnathort (Laurel Bank)	Capt. L. Kininmonth	5	1 0	398	..	45·74	206	180
D Milnathort (Ledlanet)	Sir James C. Calder, K.B.E.	5	1 0	700	..	57·72	229	195
D Milnathort (Ochil Hills San.)	Dr. R. H. Williamson.....	5	1 0	800	..	55·12	196	186

3.—EDEN. 2 sq. mi.

4.—TAY—Earn. 3 sq. mi.

FIFE. (Area, 505 sq. mi.)

1.—FORTH, LOWER—Left Bank Tributaries. 68 sq. mi.

D Rosyth (H. M. Dockyard)	The Supt. Civil Engineer..	8	1 0	53	..	33·64	200	147
d Kincardine (Tulliallan)	Col. Alexander Mitchell...	8	1 0	80	..	47·49	..	..
Carnock (Craigluscar Res.)	D.H.Shaw, Esq., M.C., C.E.	12	0 4	280	36·1	48·60	..	..

DIVISION XVI.—EAST MIDLAND COUNTIES—(*con.*).

STATIONS.	AUTHORITIES.	Rain-gauge: Diam.	Rain-gauge: Height of Rim above Ground.	Rain-gauge: Height of Ground above Sea Level.	Average Rainfall.	1928: Rainfall.	1928: Days with ·01 in. or more.	1928: Days with ·04 in. or more.
FIFE—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
2.—LEVEN & C. 208 sq. mi.								
Inverkeithing (Pitreavie Castle)	R. Richardson, Esq.	5	0 9	150	..	35·76	..	..
Dunfermline (Fordell House)	Earl of Buckinghamshire	5	1 0	250	..	40·81	..	..
D Dunfermline (Bonnyters)	L. Dalgleish, Esq.	5	0 8	500	..	46·45	264	195
D Burntisland (Cullaloe Res.)	J. A. Waddell, Esq.	5	2 0	300	..	38·92	175	155
D Kirkcaldy (Munro Street)	F. Braid, Esq.	5	1 0	66	..	36·24	224	160
Cowdenbeath (Stenhouse St.)	C. A. Alexander, Esq.	5	1 0	516	..	42·71	..	..
M Cleish Hills (Craiggaveral)	C. A. Alexander, Esq.	5	1 0	760	..	(51·02)	..	..
M Cleish Hills (Roscobie Res.)	C. A. Alexander, Esq.	5	1 0	660	..	49·10	..	..
M Cleish Hills (Blairadam Wood)	C. A. Alexander, Esq.	5	1 0	670	..	41·55	..	..
M Cleish Hills (Lochglow Res.)	C. A. Alexander, Esq.	5	1 0	900	..	40·15	..	..
D Leslie (Lothrie Reservoir)	R. Ritchie, Esq.	5	1 0	700	38·7	44·11	227	179
Markinch (Alburne Knowe)	R. Reid Russell, Esq.	5	0 11	..	..	44·10	..	..
D Elie (The Castle)	Miss E. E. Scott Moncrieff.	5	0 8	9	..	30·77	213	154
D Colinsburgh (Cairnie House)	Maj. R. A. Anstruther, D.S.O.	5	3 6	125	..	33·12	229	164
D Colinsburgh (Balcarres)	Mr. W. H. Adams	5	1 0	300	32·2	32·72	209	160
D Carnbee (Ovenstone W.W.)	C. Birrell, Esq.	5	1 0	168	..	27·17	203	151
3.—EDEN & C. 205 sq. mi.								
D Ceres (Castlebank)	Mr. Alex. Smith	5	1 0	280	..	42·26	233	183
D Cameron Waterworks	W. Watson, Esq., C.E.	5	1 0	478	..	37·76	188	169
D Cupar (Pitlair)	Mr. P. Webster	5	1 0	126	..	40·10	215	166
D Cupar (Rankeillour)	Mr. R. Tunstall	5	1 0	240	.	41·90	217	164
D Cupar (Fife & Kinross Asylum)	Medical Superintendent	5	1 0	210	..	39·20	214	168
D Kingsbarns	Miss M. R. Nimmo	5	1 0	78	..	31·07	189	154
Cupar (Over Rankeillour)	H. Giles Walker, Esq.	5	1 0	200	..	35·93	(188)	(149)
D St. Andrews (Waterworks)	W. Watson, Esq., C.E.	5	1 0	217	..	35·36	203	166
D St. Andrews	W. Watson, Esq., C.E.	5	1 0	20	..	35·10	200	160
Kilmany (Lochmalony)	W. Marshall, Esq.	5	1 0	260	..	35·28	..	..
D Leuchars (Seaplane Stn.) (+A)	The Meteorological Office	8	1 0	40	..	31·43	215	152
4.—FIRTH OF TAY. 25 sq. mi.								
D Newport (Tayfield)	W. Berry, Esq.	5	0 7	100	..	36·27	214	173
D Newport Manse	Rev. John A. Lees	5	1 0	150	..	30·98	209	150
D Newport (Seabank)	J. Grant Bruce, Esq.	5	4 6	15	..	31·91	224	156
D Tayport (Lighthouse)	J. H. Thompson, Esq., C.E.	5	1 0	27	25·8	32·05	224	155
5.—TAY—Earn. 1 sq. mi.								
6.—INSULAR.								
D Inchkeith	The Meteorological Office	8	1 0	190	21·8	26·25	189	134
Inchkeith Lighthouse	Com'rs. of N. Lighthouses	5	1 0	190	..	26·42	174	126
Isle of May	Com'rs. of N. Lighthouses	5	4 0	180	..	26·31	..	126
PERTH. (Area, 2535 sq. mi.)								
1.—FORTH—Right Bank Tributaries. 17 sq. mi.								
D Gartmore House Gardens	Mr. H. B. Matheson	5	1 0	160	..	85·93	245	209
d Loch Dhu	G. Henshilwood, Esq., C.E.	8	0 6	325	79·8	113·80	..	228
2.—FORTH, UPPER—Left Bank Tributaries. 84 sq. mi.								
w Ledard	G. Henshilwood, Esq., C.E.	8	0 6	1500	61·2	(109·90)	..	..

DIVISION XVI.—EAST MIDLAND COUNTIES—(*con.*).

STATIONS.	AUTHORITIES.	Rain-gauge Diam.	Height of Rim above Ground.	Height of Ground above Sea Level.	Average Rainfall.	1928 Rainfall.	Days with ·01 in. or more.	Days with ·04 in. or more.
PERTH—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
3.—FORTH—Teith. 221 sq. mi.								
w Loch Drunkie	G. Henshilwood, Esq., C.E.	8	0 6	420	62·1	89·35	..	..
D Invertrossachs	Sir James R. Wilson, Bt...	5	1 0	380	..	88·85	256	212
w Ben Venue (Glasahoile)	G. Henshilwood, Esq., C.E.	8	1 0	1150	..	109·65	..	..
d Loch Vennachar	G. Henshilwood, Esq., C.E.	8	0 6	275	55·3	81·15	..	204
d Bridge of Turk	G. Henshilwood, Esq., C.E.	8	0 6	275	63·5	94·85	..	219
Loch Katrine (Tunnel Hill Top)	G. Henshilwood, Esq., C.E.	8	0 6	830	81·4	116·10	..	..
Ben Ledi	G. Henshilwood, Esq., C.E.	8	0 6	1400	66·6	97·90	..	..
Achnahard	G. Henshilwood, Esq., C.E.	8	1 0	474	..	97·10	..	217
Callander (Leny House)	Capt. M. Murray Buchanan	5	1 0	340	..	83·20	..	..
w Strone Bridge	G. Henshilwood, Esq., C.E.	8	1 0	380	..	105·30	..	..
w Glen Meann	G. Henshilwood, Esq., C.E.	8	1 0	800	..	109·50	..	..
w Glen Finglas	G. Henshilwood, Esq., C.E.	8	1 0	1200	..	109·70	..	..
d Glengyle	G. Henshilwood, Esq., C.E.	8	0 6	380	89·9	127·20	..	245
w Upper Glengyle	G. Henshilwood, Esq., C.E.	8	1 0	750	..	133·95	..	..
w Allt a' Choin	G. Henshilwood, Esq., C.E.	8	1 0	1250	..	119·50	..	..
w Balquhidder (Blaircreach)	J. M. Fergusson, Esq.	5	1 0	460	..	132·85	..	..
d Balquhidder (Stronvar)	J. Gault, Esq.	5	1 0	422	74·2	83·90 ?	..	..
4.—FORTH, LOWER—Left Bank Tributaries. 107 sq. mi.								
D Dunblane	W. L. Gibson, Esq., C.E...	5	1 0	250	..	50·99	231	193
D Glendevon (Glenquey Res.) No. 2	H. F. Hodge, Esq., C.E...	8	1 0	945	..	80·46	217	203
D Glendevon (Tormaukin)	Mr. W. Phillips	5	1 6	770	..	73·81	221	188
D Glendevon (Frandy)	H. F. Hodge, Esq., C.E. ..	8	1 0	911	..	86·84	246	211
Glendevon (Glensherup)	D. H. Shaw, Esq., M.C., C.E.	12	0 4	945	..	81·89	..	..
M Glendevon No. 1	H. F. Hodge, Esq., C.E. ..	8	1 0	1202	..	79·57	..	..
M Glendevon No. 10	H. F. Hodge, Esq., C.E. ..	8	1 0	1408	..	68·01	..	..
5.—LEVEN. 1 sq. mi.								
6.—EDEN. 4 sq. mi.								
7.—TAY—Earn. 376 sq. mi.								
D Gleneagles House	Mr. P. Douglas	8	1 0	447	..	67·13	262	206
Upper Farg (Plains)	Messrs. Leslie & Reid, C.E.	8	1 0	900	..	46·27	..	..
Upper Farg (Main Bank)	Messrs. Leslie & Reid, C.E.	5	1 0	642	..	39·44	..	..
d Dunning (Kippen House)	Lady Wilson	5	1 0	450	..	59·68	..	166
D Bridge of Earn (Ballendrick)	Capt. O. A. Taylor	5	1 0	35	..	41·49	221	162
d Bridge of Earn (Kinmonth)	J. Moncrieff Wright, Esq. .	5	1 0	..	..	36·91	..	156
D Lochearnhead (Ardloch)	S. Moir, Esq.	5	1 0	400	..	85·86	257	209
D Lochearnhead (Edinchip)	Sir Malcolm MacGregor, Bt.	5	1 0	513	..	91·91	262	215
D Comrie (Dunira)	W. Gilchrist Macbeth, Esq.	10	1 6	240	..	74·25	232	196
D Crieff (Strathearn Hydro)	Dr. G. Meikle	5	1 0	478	40·9	55·44	236	183
8.—TAY—Aimond & C. 149 sq. mi.								
D Perth (Wellshill Cemetery)	J. Ritchie, Esq.	5	1 0	76	30·8	35·88	231	156
w Logiealmond Lodge	Earl of Mansfield	8	1 3	1020	..	63·89	..	..
D Glen Almond (Auchnafree)	Capt. J. A. C. Whitaker...	5	1 0	1025	..	90·97	221	195
9.—TAY—Strathtay below Dunkeld. 33 sq. mi.								
Murthly (Douglasfield)	W. A. Rae, Esq.	5	1 0	237	34·9	43·17	198	167
d Dunkeld (Birnam School)	Chas. A. Lunan, Esq.	5	1 3	160	..	(50·42)	(222)	(161)
D Dunkeld (Snaigow)	W. H. Cox, Esq.	5	1 0	370	..	44·47	222	164

DIVISION XVI.—EAST MIDLAND COUNTIES—(*con.*).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge Height of Rim above Ground.	Rain-gauge Height of Ground above Sea Level.	Average Rainfall.	1928 Rainfall.	1928 Days with .01 in. or more.	1928 Days with .04 in. or more.
PERTH—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
10.—TAY—Bran. 81 sq. mi.								
D Strath Bran (Glenquaich Lodge)	W. H. Cox, Esq.	5	1 0	900	..	78·25	219	208
11.—TAY—Strathtay above Dunkeld. 95 sq. mi.								
d Aberfeldy (Bolfracks Cottage)	Mrs. Drummond-Fish	5	1 0	350	..	49·39	..	..
D Aberfeldy (Dall Avon)	Dr. N. D. Mackay	5	1 0	220	..	52·71	241	175
D Grandtully	W. L. Macnaughton, Esq.	5	1 0	320	36·1	46·18	224	172
12.—TAY—Loch Tay. 241 sq. mi.								
D Killin (Auchmore Gardens)	Mr. J. Easson	5	1 0	380	..	84·45	222	192
13.—TAY—Lyon. 142 sq. mi.								
D Glenlyon (Meggernie Castle)	Sir E. S. Wills, Bt.	5	1 0	700	..	88·12	243	204
w Fortingall (Glenlyon House)	Mr. J. W. Ford	5	1 0	425	..	61·41	..	..
14.—TAY—Tummel. 587 sq. mi.								
D Loch Rannoch (Dall)	Mr. D. Robertson, Jun.	5	1 0	722	..	62·74	220	174
d Pitlochry (Dunfallandy)	D. Stewart-Fergusson, Esq.	5	1 0	405	..	43·74	..	177
d Foss (The Manse)	Rev. W. Walker, M.A., B.D.	8	1 0	500	..	58·45	..	..
D Pitlochry (Bonskeid)	Dr. G. F. Barbour	5	1 0	540	..	40·94	226	174
D Fincastle House	Dr. G. F. Barbour	5	1 0	980	..	41·90	221	152
D Struan (Auchleeks)	Mr. A. Kennedy	5	1 0	..	..	59·74	252	188
D Blair Atholl (Blair Castle Grdns)	Mr. J. Dickson	5	1 0	500	33·1	47·60	258	176
D Glen Garry (Dalnaspidal Lodge)	Mr. J. Macbeth	5	1 0	1414	..	74·84	(232)	(216)
D Glen Bruar (Bruar Lodge) No. 1	Mr. A. McLauchlan	5	1 0	1600	..	60·49	240	202
15.—TAY—Isla. 282 sq. mi.								
D Blairgowrie (Kinloch Manse)	Rev. T. Milne	5	1 0	280	..	35·03	214	153
D Dunkeld (Cardney)	A. R. Macgregor, Esq.	5	1 0	350	..	49·92	215	178
D Kirkmichael (Ballintuim Ho.)	Miss M. A. Macdonald	5	1 4	700	..	51·73	245	174
16.—TAY—Left Bank Tributaries. 51 sq. mi.								
Pitfour Castle	Miss D. Cairns	..	..	..	..	35·50	198	169
D Kinfauns (Balthayock)	R. Wylie Hill, Esq.	5	4 6	323	..	34·80	218	163
D Scone Palace	Earl of Mansfield	5	0 11	91	..	38·59	217	169
17.—FIRTH OF TAY. 45 sq. mi.								
Errol (Annat Cottage)	W. Kimm, Esq.	5	3 0	150	..	31·34	..	..
18.—SPEY—Right Bank Tributaries. 1 sq. mi.								
19.—LOCH LINNHE.—Left Bank Tributaries. 2 sq. mi.								
20.—CLYDE—Leven. 36 sq. mi.								

DIVISION XVI.—EAST MIDLAND COUNTIES—(*con.*).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge: Height of Rim above Ground.	Rain-gauge: Height of Ground above Sea Level.	Average Rainfall.	1928: Rainfall.	1928: Days with ·01 in. or more.	1928: Days with ·04 in. or more.
ANGUS (FORFAR). (Area, 875 sq. mi.)		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
1.—TAY—Isla. 211 sq. mi.								
D Kettins School	W. Andrew, Esq.	5	1 0	218	..	38·61	208	153
D Glamis Castle	Mr. D. McInnes	5	0 9	250	..	42·15	192	159
D Kirriemuir (Lintrathen)	G. Baxter, Esq., C.E.	5	1 0	700	34·7	43·36	205	162
M Kirriemuir (Balnakeilly)	G. Baxter, Esq., C.E.	5	1 0	700	..	43·25	..	..
M Kirriemuir (Creich Hill, N.)	G. Baxter, Esq., C.E.	5	1 0	1491	..	50·70	..	..
Kirriemuir (Macritch)	G. Baxter, Esq., C.E.	5	1 0	1300	..	44·20	..	..
Kirriemuir (Longdrum)	G. Baxter, Esq., C.E.	5	1 0	1045	..	51·60	..	..
Kirriemuir (Glendye)	G. Baxter, Esq., C.E.	5	1 0	1050	..	55·55	..	..
Kirriemuir (Barny)	G. Baxter, Esq., C.E.	5	1 0	1130	..	51·95	..	..
Kirriemuir (Glenhead)	G. Baxter, Esq., C.E.	5	1 0	1340	..	52·20	..	..
Kirriemuir (Glendamff)	G. Baxter, Esq., C.E.	5	1 0	1360	..	54·85	..	..
2.—FIRTH OF TAY. 80 sq. mi.								
D Buddonness (Low Light)	J. H. Thompson, Esq., C.E.	5	1 0	27	25·3	29·44	245	162
D Dundee Harbour	J. H. Thompson, Esq., C.E.	5	0 11	14	27·5	30·56	199	152
D Dundee (Eastern Necropolis)	A. Macrae, Esq.	5	1 0	198	27·4	35·53	213	167
d Dundee (Camperdown Works)	Messrs. Cox Bros., Ltd.	5	1 2	300	..	35·25	..	..
D Dundee (Balruddery)	J. Martin White, Esq.	5	1 0	266	29·8	36·61	188	163
D Dundee (College Garden)	Director of Studies	8	1 0	147	26·2	33·64	202	162
3.—SOUTH ESK & C. 371 sq. mi.								
D Carnoustie	A. F. Anderson, Esq., C.E.	8	1 0	39	..	31·95	226	170
D Monikie Reservoir †	G. Baxter, Esq., C.E.	5	1 0	494	34·7	37·38	212	162
D Monikie (Crombie Reservoir)	G. Baxter, Esq., C.E.	5	1 0	522	37·3	41·05	227	172
M Monikie (Fallaws)	G. Baxter, Esq., C.E.	8	3 0	585	..	42·22	..	..
D Arbroath (W. Cemetery)	J. W. Robertson, Esq.	5	1 0	93	..	30·63	186	150
W Arbroath (Muirheads Res.)	T. A. Hogg, Esq., C.E.	5	1 0	251	..	36·32	..	..
Forfar (Pitscandly House)	J. T. Ewen, Esq.	5	1 8	300	..	(24·89)	..	..
D Montrose	D. Maxwell, Esq., C.E.	5	1 0	16	..	29·35	195	140
D Montrose (West-End Park)	D. Maxwell, Esq., C.E.	5	1 0	12	..	33·03	216	158
D Brechin (Argyll Street)	J. Hutton, Esq.	5	1 0	224	..	35·80	230	158
D Forfar W.W. (Den of Ogil)	A. Watterston, Esq., C.E.	12 x 4	0 3	633	..	41·87	216	175
D Glenogil Waterworks	T. A. Hogg, Esq., C.E.	5	1 0	770	..	47·87	208	178
d Glen Prosen (Pearsie House)	G. M. Wedderburn, Esq.	5	1 0	600	..	44·47	..	139
Glen Prosen (Lednathie)	J. S. Darling, Esq.	5	1 0	720	43·2	59.08	..	..
4.—NORTH ESK & C. 213 sq. mi.								
Brechin (Trinity)	Miss E. A. Stevenson	8	1 0	295	..	34·96	..	..
D Montrose (Sunnyside Asylum)	C. K. Alexander, Esq.	5	1 0	200	27·0	32·31	222	157
D Montrose (Kinnaber W.W.)	D. Maxwell, Esq., C.E.	5	1 0	38	..	30·49	214	157
Brechin (Stracathro Gardens)	Mr. A. Dunlop	5	1 0	200	..	35·43	..	..

DIVISION XVII.—NORTH-EASTERN COUNTIES.

KINCARDINE. (Area, 382 sq. mi.)								
1.—NORTH ESK & C. 99 sq. mi.								
D Marykirk (Balmakewan)	W. Low, Esq.	5	1 1	120	..	35·13	226	155
D Marykirk (Balmakewan), No. 2.	W. Low, Esq.	5	1 0	80	..	35·64	250	159
D Laurencekirk (Johnston Lodge)	R. B. Pearson, Esq.	5	1 0	400	..	37·80	226	160
D Fettercairn (Fasque)	Sir J. E. Gladstone, Bt.	5	1 0	320	..	40·38	238	175
2.—BERVIE, COWIE & C. 139 sq. mi.								
Todhead Pt. Lighthouse	Com'rs. of N. Lighthouses	5	1 9	114	..	27·79	..	146
D Stonehaven (Mains of Cowie)	John Hart, Esq.	5	1 0	93	27·3	32·17	224	141
Stonehaven (Ury Gardens)	Mr. W. Thomson	5	1 2	200	..	38·37	214	160
Girdleness	Com'rs of N. Lighthouses	7	4 0	89	..	30·95	..	136
Drumoak (Durris House)	(R) Andrew Reid, Esq.	5	3 0	200	..	36·29	..	..

† Formerly known as Craigton.

DIVISION XVII.—NORTH-EASTERN COUNTIES—(*con.*).

STATIONS.	AUTHORITIES.	Rain-gauge Diam.	Height of Rim above Ground.	Height of Ground above Sea Level.	Average Rainfall.	1928 Rainfall.	Days with .01 in. or more.	Days with .04 in. or more.
KINCARDINE—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
3.—DEE. 144 sq. mi.								
D Strachan (Bridge of Dye)	Sir J. E. Gladstone, Bt.	5	1 0	513	..	49·76	250	174
D Banchory (Invery)	Major Jas. Kerr	5	1 0	225	..	37·48	230	165
D Banchory (Blackhall Castle)	Mrs. F. T. Hay	5	0 8	220	..	31·31	202	162
D Banchory (Invercannie)	T. F. Henderson, Esq., C.E.	5	1 0	205	..	32·54	231	154
ABERDEEN. (Area, 1974 sq. mi.)								
1.—DEE. 672 sq. mi.								
D Glen Muick	T. F. Henderson, Esq., C.E.	5	1 0	1370	..	56·25	237	205
M Glen Tanner (Aitnach)	T. F. Henderson, Esq., C.E.	5	1 0	1260	..	53·56	..	..
d Braemar (Bank)	A. R. Clark, Esq.	5	..	1114	..	(41·49)	(202)	(185)
D Braemar (Derry Lodge)	T. F. Henderson, Esq., C.E.	5	1 0	1400	..	42·90	261	184
D Balmoral Castle Gardens	Mr. R. F. Chalmers	5	1 0	927	33·0	40·97	250	177
D Abergeldie Castle Gardens	Mr. J. Durran	5	1 0	800	..	35·00	188	163
D Ballater (Irrigation Farm)	T. F. Henderson, Esq., C.E.	5	1 0	637	..	32·27	226	171
M Beinn Bhreac	T. F. Henderson, Esq., C.E.	5	1 0	2700	..	57·74	..	..
D Aboyne	T. F. Henderson, Esq., C.E.	5	1 0	412	..	31·09	174	152
D Dess House	W. R. Davidson, Esq.	5	1 8	480	..	30·75	221	164
D Glen Gairn (GairnShielLodge)	T. F. Henderson Esq., C.E.	5	1 0	1100	..	37·46	219	173
D Glen Gairn (Corndavon)	T. F. Henderson Esq., C.E.	5	1 0	1500	..	39·15	229	181
D Torphins (School House)	Dr. George Davidson	5	1 6	480	..	28·70	210	150
M Lumphanan	T. F. Henderson, Esq., C.E.	5	1 0	490	..	30·25	..	..
D Drumoak (Drum Castle)	Mrs. Irvine	5	1 0	320	..	35·34	227	160
D Logie Coldstone School	J. B. Anderson, Esq.	5	1 0	608	30·9	30·18	251	161
D Aberdeen (Mannofield Res.)	T. F. Henderson, Esq., C.E.	5	1 0	171	..	33·90	242	159
2.—DON. 512 sq. mi.								
D Aberdeen (King's College) (+▲)	The Meteorological Office	8	1 0	46	29·5	32·08	225	159
d Strathdon (Estates Office)	C. Christie, Esq.	5	1 2	990	..	31·15	..	..
D Craibstone (Sth. Methil Field)	Prof. J. Hendrick	5	1 0	275	..	33·77	230	169
D Craibstone (Woodlands Field)	College of Agriculture	8	1 0	300	..	31·89	222	160
D Dyce (Parkhill House)	J. E. Crombie, Esq.	8	0 11	170	..	33·69	219	166
M New Machar (Straloch)	Mrs. Irvine	5	4 0	320	..	27·26	..	..
D Inverurie (Westfield)	James Skinner, Esq.	5	1 0	207	..	28·74	251	152
3.—YTHAN & C. 285 sq. mi.								
D Ellon (Esslemont House)	Capt. R. Wolrige Gordon, M.C.	5	1 6	100	29·8	31·14	249	170
D Ellon (Auchmacoy)	Earl of Caithness	5	1 0	150	..	26·66	209	142
D Haddo House	Earl of Haddo	5	1 0	186	..	29·32	237	166
D Fyvie Castle	Col. Sir C. R. Forbes-Leith, Bt.	5	1 0	200	..	32·29	185	160
4.—UGIE & C. 257 sq. mi.								
Buchanness	Com'rs. of N.Lighthouses	5	2 0	39	..	23·93 ?	..	147
D New Deer School House	J. A. Thomson, Esq.	5	1 0	397	32·3	33·37	214	165
D Peterhead (Stock Bridge)	J. Robertson, Esq.	5	1 0	150	..	26·64	210	142
D Peterhead (Mains of Buthlaw)	W. Johnston, Esq.	5	1 6	120	..	27·83	218	153
D Peterhead (Forehill Works)	J. Dickie, Esq., C.E.	5	0 8	133	..	29·90	221	159
D Brucklay Castle	A. Dingwall Fordyce, Esq.	5	1 0	300	..	36·20	204	168
Kinnaird Head	Com'rs. of N.Lighthouses	5	1 0	62	..	26·60	..	..
5.—DEVERON & C. 248 sq. mi.								
Huntly (Corsdean)	R. Milne, Esq.	5	1 0	390	..	34·80	..	..
D Huntly (Cruchie)	Miss C. Joss	5	1 0	400	..	30·92	247	156

DIVISION XVII.—NORTH-EASTERN COUNTIES—(*con.*).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge Height of Rim above Ground.	Rain-gauge Height of Ground above Sea Level.	Average Rainfall.	1928 Rainfall.	1928 Days with ·01 in. or more.	1928 Days with ·04 in. or more.
BANFF. (Area, 630 sq. mi.)		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
1.—YTHAN. 1 sq. mi.								
2.—DEVERON & C. 344 sq. mi.								
d Keith Station	F. G. Watt, Esq.	5	1 0	364	33·8	31·73	(195)	(167)
D Turriff (Forglen Gardens)	Mr. G. Stuart	5	1 0	220	..	30·44	243	167
d Gamrie (Clenterty P. School)	T. H. Smith, Esq.	5	1 0	420	..	35·11	(240)	(170)
D Banff	I. H. Gordon, Esq.	5	0 9	130	..	26·26	220	152
Buckie (Rochonnie)	W. Hendry, Esq.	5	1 4	334	..	27·20	..	..
Buckie (West Church Street)	W. Hendry, Esq.	5	1 4	76	..	26·85	..	..
d Cullen House Gardens	Mr. R. Ferguson	5	1 0	100	32·4	30·20	..	..
3.—SPEY—Right Bank Tributaries. 285 sq. mi.								
D Ballindalloch	C. Mackenzie, Esq.	8	1 0	630	..	38·13	245	167
d Aberlour (Dailuaine)	Mr. J. Tullo, for R.Met.Soc.	5	1 0	500	..	34·70	(240)	(182)
D Aberlour Orphanage	J. G. White, Esq.	5	1 0	350	..	32·79	208	163
MORAY. (ELGIN.) (Area, 477 sq. mi.)								
1.—DEVERON & C. 7 sq. mi.								
2.—SPEY—Right Bank Tributaries. 35 sq. mi.								
D Gordon Castle	Mr. C. Webster	5	1 0	104	29·8	28·63	219	145
3.—SPEY—Left Bank Tributaries. 133 sq. mi.								
D Grantown-on-Spey	W. A. Watson, Esq.	5	1 1	700	31·1	33·08	218	165
D Knockando (Windmill Cottage)	Mr. L. Younie	5	1 0	600	..	35·12	235	171
D Aberlour (Wester Elchies)	Mr. A. Ross	5	1 0	550	..	34·63	226	167
4.—LOSSIE & C. 154 sq. mi.								
D Lhanbryde (Blackhills House)	T. N. Christie, Esq.	5	3 6	310	..	28·89	199	163
D Elgin (Kirkhill)	P. J. Macdonald, Esq.	5	1 7	35	..	25·30	173	144
M Elgin (Rotha)	W. C. Young, Esq.	5	1 0	60	..	24·70	..	..
D Duffus House	Mr. W. Ogg	5	1 0	55	..	24·99	188	157
D Duffus (Hopeman Lodge)	Mrs. Gordon Duff	8	0 6	65	..	25·69	186	146
5.—FINDHORN & C. 148 sq. mi.								
D Darnaway Castle Gardens	Earl of Moray	5	1 6	170	..	31·03	179	166
d Kinloss (Findhorn)	Major T. Ross	5	0 9	15	..	21·31	..	..
NAIRN. (Area, 163 sq. mi.)								
1.—FINDHORN & C. 102 sq. mi.								
D Ardclach (Glenferness)	Mr. A. McKenzie	8	1 6	700	..	40·77	232	204
2.—NAIRN & C. 61 sq. mi.								
D Nairn (Balblair)	Major H. C. H. Allanby	5	1 0	94	..	27·64	233	161
D Nairn (Achareidh)	Major K. S. Clarke	8	1 0	59	24·6	28·08	242	171
D Nairn (Delnies)	The Meteorological Office	8	1 9	82	24·9	28·41	224	160

DIVISION XVIII.—NORTH-WESTERN COUNTIES.

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge Height of Rim above Ground.	Rain-gauge Height of Ground above Sea Level.	Average Rainfall.	1928 Rainfall.	1928 Days with ·01 in. or more.	1928 Days with ·04 in. or more.
INVERNESS. (Area, 4,146 sq. mi.)		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
1.—TAY—Tummel. 28 sq. mi.								
2.—SPEY—Right Bank Tributaries. 437 sq. mi.								
D Dalwhinnie (Drumochter Lo.)	Mr. D. Kennedy	5	1 0	1375	..	76·57	264	233
D Glen Tromie (Gaick Lodge)	Mr. C. Chisholm	5	1 0	1500	..	74·58	272	224
D Nethy Bridge (U.F. Manse)	Rev. John Ross	5	1 0	750	..	29·56	208	156
3.—SPEY—Left Bank Tributaries. 257 sq. mi.								
D Cluny Castle	Mr. A. Macdonald	5	1 0	816	..	53·75	253	206
M Loch Spey	British Aluminium Co. Ltd.	5	1 0	1164	..	80·63	..	..
D Glen Spey (Mealgarve)	British Aluminium Co. Ltd.	8	1 0	1135	..	65·25	252	222
D Laggan (Gergask)	British Aluminium Co. Ltd.	8	1 0	870	..	45·74	248	200
D Kingussie	British Aluminium Co. Ltd.	8	1 0	815	..	41·49	249	178
d Alvie Manse	Rev. Dugald Maclean	5	1 0	750	30·3	40·73	..	..
D Carr Bridge (Crannich)	Mrs. J. A. Doak	5	1 0	900	..	35·80	236	177
4.—FINDHORN. 164 sq. mi.								
5.—NAIRN & C. 131 sq. mi.								
6.—NESS—Right Bank Tributaries. 252 sq. mi.								
D Fort Augustus (St. Benedict's)	The Procurator	5	1 0	68	44·2	60·34	230	202
M Loch Ness (Killin, Whitebridge)	British Aluminium Co. Ltd.	8	1 0	1200	..	66·88	..	..
D Loch Ness (Garthbeg)	British Aluminium Co. Ltd.	8	1 0	645	..	49·93	247	201
D Loch Ness (Foyers)	British Aluminium Co. Ltd.	8	1 0	52	..	48·68	229	183
d Loch Ness (Aberchalder)	British Aluminium Co. Ltd.	8	1 0	700	..	51·14	..	182
D Inverness (Culduthel Res.)	A. Knowles, Esq.	5	1 0	242	..	33·91	213	153
7.—NESS—Garry &c. 185 sq. mi.								
M Loch Quoich (Loan)	Col. D. W. Cameron	5	1 0	650	..	141·80	..	..
D Loch Quoich (Kinlochquoich)	Col. D. W. Cameron	5	1 0	560	..	130·71	228	226
D Loch Quoich (Glenquoich)	T. Mackenzie, Esq.	5	1 2	569	..	138·05	246	230
8.—NESS—Moriston. 120 sq. mi.								
9.—NESS—Enrick. 131 sq. mi.								
D Inverness (Ruigh Ard Asylum)	Dr. T. C. Mackenzie	5	0 11	330	..	38·40	239	170
10.—BEAULY. 341 sq. mi.								
11.—CROMARTY FIRTH. 13 sq. mi.								
12.—SOUND OF SLEAT. 259 sq. mi.								
D Loch Nevis (Inverie Gardens)	Mr. J. Huggins	5	1 0	15	..	93·57	249	223
D Glenelg Manse	Rev. A. Mactaggart	5	1 0	85	..	65·86	235	210
13.—SOUND OF ARISAIG. 126 sq. mi.								
D Moidart (Kinlochmoidart)	J. C. Stewart, Esq.	5	1 0	13	..	82·48	254	226
D Moidart (Roshven)	Mrs. Wm. Blackburn	5	1 0	40	..	82·98	255	221
D Arisaig (Faire-na-Sguir)	Miss C. C. Astley	5	1 0	30	..	54·96	247	205
D Arisaig House	Mr. W. Grant	5	1 0	45	62·9	68·30	240	219
d Mallaig Manse	Rev. D. M. Sinclair	5	1 0	150	..	59·27	..	229
14.—LOCH LINNHE—Right Bank Tributaries. 48 sq. mi.								
d Loch Eil (Achdalieu)	Col. D. W. Cameron	5	1 0	100	..	75·66 ?	..	201
15.—LOCHY—Right Bank Tributaries. 143 sq. mi.								
D Loch Arkaig (Achnacarry)	Col. D. W. Cameron	5	1 0	128	..	108·74	255	222
d Loch Arkaig Glendessary)	Col. D. W. Cameron	5	1 0	300	..	128·19	..	252

DIVISION XVIII.—NORTH-WESTERN COUNTIES—(*con.*).

STATIONS.	AUTHORITIES.	Rain-gauge: Diam.	Rain-gauge: Height of Rim above Ground.	Rain-gauge: Height of Ground above Sea Level.	Average Rainfall.	1928: Rain fall.	1928: Days with ·01 in. or more.	1928: Days with ·04 in. or more.
INVERNESS—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
16.—LOCHY—Left Bank Tributaries. 362 sq. mi.								
Loch Treig (Creaguaineach)	British Aluminium Co.,Ltd.	5	1 0	800	..	95·80	..	..
Loch Ossian (Strathossian Ho.)	British Aluminium Co.,Ltd.	8	1 0	1180	..	86·90	..	..
Fort William(Allt'aMhuilinn)	British Aluminium Co.,Ltd.	8	1 0	1000	..	108·73	..	..
D Fort William (The Factory)	BritishAluminium Co.,Ltd.	8	1 0	75	..	83·84	233	205
Roybridge (Lairig Road)	British Aluminium Co.,Ltd.	8	1 0	1650	..	115·52	..	..
Spean Bridge (The Cour)	British Aluminium Co.,Ltd.	5	1 0	1050	..	117·99	..	..
Spean Bridge (Sgurr Finisgaig)	British Aluminium Co.,Ltd.	8	1 0	2000	..	117·62	..	..
Loch Treig (Fersit)	British Aluminium Co.,Ltd.	8	1 0	850	..	85·89	..	..
Loch Treig (Allt Laire)	British Aluminium Co.,Ltd.	5	1 0	1050	..	79·72	..	..
D Roy Bridge (Allt Leachdach)	British Aluminium Co.,Ltd.	8	1 0	650	..	71·12	231	203
M Loch Pattaig	Sir J. F. Ramsden, Bt.	5	0 8	1442	..	85·10	..	..
Glen Spean (Craigbeg)	British Aluminium Co.,Ltd.	8	1 0	860	..	68·97	..	..
W Loch Lochy (Invergloy)	Mr. J. Strang	5	1 0	200	..	80·29	..	..
M Loch Laggan (Ardverikie)	Sir J. F. Ramsden, Bt.	5	0 6	825	..	71·35	..	..
17.—LOCH LINNHE—Left Bank Tributaries. 120 sq. mi.								
D North Ballachulish(Alltshellach)	B. Chinnery-Haldane, Esq.	5	2 1	80	..	96·13	247	221
D Onich	Forestry Commission	5	1 3	48	..	87·91	242	209
D Glenleven(BlackwaterDam,N)	7 British Aluminium Co.,Ltd.	8	1 0	1072	..	117·48	269	234
D Kinlochleven (Kinlochmore Lo.)	Mr. D. MacKenzie	5	1 0	115	..	119·29	274	234
Kinlochleven (Mamore Lodge)	Mr. D. MacKenzie	5	1 8	700	..	120·76	..	..
Glenleven (Invercam) .. No. 6	British Aluminium Co.,Ltd.	8	1 6	1070	..	94·43	..	..
Glenleven (Ciarin) ..... No. 3	British Aluminium Co.,Ltd.	8	1 6	1200	..	99·19	..	..
Glenleven (Loch Eilde Mhor) 8	British Aluminium Co.,Ltd.	8	1 6	1130	..	117·81	..	..
Glenleven(Loch Eilde Beg)No. 9	British Aluminium Co.,Ltd.	8	1 6	1125	..	113·16	..	..
Glenleven (Corrour) .... No. 5	British Aluminium Co.,Ltd.	8	1 6	1260	..	94·50	..	..
D Fort William	J. F. Watson, Esq.	5	1 0	281	78·8	92·07	236	215
18.—INSULAR, INNER HEBRIDES. 786 sq. mi.								
D Isle of Eigg	Rt. Hon. Walter Runciman,P.C.	8	2 8	150	..	53·88	205	192
Hyskier	Com'rs. of N. Lighths's	5	0 5	31	..	54·85	195	189
D Skye (Kyleakin, Dunringell)	Maj.A.D.Mackinnon,C.M.G.	5	2 1	80	..	79·37	243	215
Kyleakin Lighthouse	Com'rs. of N. Lighthouses	5	0 8	28	..	63·70	216	205
Oronsay Lighthouse	Com'rs. of N. Lighthouses	5	0 6	10	..	54·46	209	202
D Skye (Scalpay Island)	Mr. D. Gunn	5	1 0	4	..	97·76	248	218
D Skye (Portree)	D. Dewar, Esq.	5	1 0	65	..	82·15	262	222
Skye (N. Eist Point)	Com'rs. of N. Lighthouses.	5	0 8	65	..	58·12	210	201
D Skye (Dunvegan)	Mrs. Mackenzie	5	3 0	47	..	75·65	251	226
Rona	Com'rs. of N.Lighthouses	5	1 3	202	..	39·22	217	184
19.—INSULAR, OUTER HEBRIDES. 243 sq. mi.								
Glas Island Lighthouse	Com'rs. of N. Lighthouses	5	0 9	31	..	35·57 ?	224	203
Monach Lighthouse	Com'rs. of N. Lighthouses	8	0 4	2	..	36·98	211	183
d Barra (Skallary)	J. Smith, Esq.	8	0 10	26	..	(53·22)	..	..
d Loch Maddy (Rudha-nan-Gall)	R.MacDonald,Esq.,C.M.G.	5	0 11	12	..	53·15	259	227
d Lochmaddy (Vallay)	George Beveridge, Esq.	5	1 1	30	..	41·36	(216)	(181)
D N. Harris (Amhuinsuidh Castle)	Norman Robertson, Esq.	5	1 3	12	..	60·07	243	220
ROSS & CROMARTY. (Area, 3,237 sq. mi.)								
1.—NESS—Moriston. 35 sq. mi.								
2.—BEAULY. 109 sq. mi.								
3.—MORAY FIRTH COAST STREAMS. 64 sq. mi.								
D Fortrose	A. Thom, Esq.	5	1 0	69	..	27·21	222	145
d Fearn (Geanies)	Mr. A. Munro	5	0 11	200	..	25·37	..	141

DIVISION XVIII.—NORTH-WESTERN COUNTIES—(*con.*).

STATIONS.	AUTHORITIES.	Rain-gauge Diam.	Height of Rim above Ground.	Height of Ground above Sea Level.	Average Rainfall.	1928 Rainfall.	Days with .01 in. or more.	Days with .04 in. or more.
ROSS & CROMARTY—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
4.—CROMARTY FIRTH. 714 sq. mi.								
D Strathpeffer	W. P. Hutton, Esq.	8	1 0	125	30·5	38·27	238	174
D Dingwall (The Academy)	G. L. Turnbull, Esq.	5	1 0	18	..	36·76	224	165
D Cromarty House	Mr. D. Ross	5	1 0	80	..	27·29	242	148
Cromarty	Com'rs. of N. Lighthouses.	5	1 0	21	..	23·99 ?	..	141
D Alness (Ardross Castle)	Mr. John Melrose	5	1 0	450	38·5	47·15	251	200
5.—DORNOCH FIRTH. 355 sq. mi.								
D Tain (Ardlarach)	Lt.-Col. C. MacIver Ritchie	5	1 0	400	..	35·12	244	176
Tarbetness	Com'rs. of N. Lighthouses.	5	1 10	62	..	25·04	206	176
6—ENARD BAY. 78 sq. mi.								
7.—LOCH BROOM & C. 367 sq. mi.								
Loch a' Bhraoin (Vroain)	Rev. Sir Montague-Fowler, Bt.	8	0 9	822	..	77·65	..	..
Loch Drome	Rev. Sir Montague-Fowler, Bt.	8	0 7	905	..	78·50	..	..
Braemore House	Rev. Sir Montague-Fowler, Bt.	8	0 7	800	..	83·75	..	..
Inverbroom House	Rev. Sir Montague-Fowler, Bt.	8	0 7	50	..	67·18	..	..
D Ullapool	Dr. D. Wallace	5	1 6	75	..	50·66	242	218
8.—LOCH EWE, LOCH TORRIDON & C. 423 sq. mi.								
D Loch Torridon (Bendamph)	Earl of Lovelace	5	1 0	20	85·1	93·82	240	235
D Poolewe (Inverewe Gardens)	Mr. W. Hepburn	5	0 6	20	..	56·68	244	204
Rudh Ré Lighthouse	Com'rs. of N. Lighthouses.	5	0 6	53	..	37·98 ?	220	197
9.—LOCH CARRON, LOCH ALSH & C. 401 sq. mi.								
D Glenshiel (Ratagan)	Forestry Commission	5	1 0	12	..	101·87	229	217
d Loch Carron (Strome Ferry)	Mr. D. D. Munro	5	1 0	50	..	74·97	..	..
D Loch Carron (Dunhulladale)	Mrs. G. J. Campbell	5	1 0	9	..	78·61	277	229
Applecross Gardens	Mr. J. McCowan	5	1 0	70	57·3	63·09	..	..
D Achnashellach	Forestry Commission	5	1 0	225	..	86·96	242	229
10.—INSULAR, OUTER HEBRIDES. 691 sq. mi.								
D Stornoway (Leurbost School)	P. C. Copland, Esq.	5	1 0	100	..	50·16	242	203
Tiumpan Head Lighthouse	Com'rs. of N. Lighthouses.	5	1 0	103	..	40·85	..	..
Stornoway Lighthouse	Com'rs. of N. Lighthouses.	5	0 6	28	..	51·29	243	218
D Stornoway	The Meteorological Office	8	1 0	30	49·9	52·69	269	214
Butt of Lewis Lighthouse	Com'rs of N. Lighthouses.	8	3 9	51	..	43·23	..	..

DIVISION XIX.—NORTHERN COUNTIES.

SUTHERLAND. (Area, 2080 sq. mi.)								
1.—DORNOCH FIRTH. 413 sq. mi.								
D Lairg	A. Gunn, Esq.	5	1 0	330	37·3	41·28	227	179
2.—FLEET, BRORA & C. 309 sq. mi.								
d Golspie (Technical School)	E. W. Read, Esq.	5	1 3	100	..	31·35	..	..
D Brora	C. A. Akroyd, Esq.	5	0 6	60	..	31·87	243	168
3.—HELMSDALE & C. 226 sq. mi.								
d Helmsdale Station	W. Stalker, Esq.	5	1 0	120	..	(36·75)	..	..

DIVISION XIX.—NORTHERN COUNTIES—(*con.*).

STATIONS.	AUTHORITIES.	Rain-gauge: Diam.	Height of Rim above Ground.	Height of Ground above Sea Level.	Average Rainfall.	1928: Rainfall.	Days with ·01 in. or more.	Days with ·04 in. or more.
SUTHERLAND—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
4.—NORTH COAST STREAMS 736 sq. mi.								
D Skerray (Borgie)	Mr. C. Spence	5	1 0	110	..	40·94	241	207
D Tongue	Mr. A. Sargent	5	1 0	180	41·0	42·22	260	194
D Melvich	A. MacIntosh, Esq.	5	1 0	200	36·0	42·25	235	196
Cape Wrath	Com'rs. of N. Lighthouses.	5	0 9	346	..	34·65	..	184
5.—LOCH LAXFORD & C. 256 sq. mi.								
D Loch More (Achfary)	Mr. J. Munro	5	1 0	137	75·8	86·19	269	235
6.—ENARD BAY. 138 sq. mi.								
Stour Head	Com'rs. of N. Lighthouses.	5	0 10	174	..	27·93 ?	220	167
7.—INSULAR. 2 sq. mi.								
CAITHNESS. (Area, 696 sq. mi.)								
1.—BERRIEDALE, DUNBEATH & C. 169 sq. mi.								
Clythness	Com'rs. of N. Lighthouses.	5	1 5	133	..	32·76	..	159
2.—WICK & C. 184 sq. mi.								
D Wick (South Head C. G. Stn.)	The Meteorological Office	8	1 2	81	29·9	31·47	258	179
Nosshead	Com'rs. of N. Lighthouses.	5	0 9	129	26·7	31·98	..	154
3.—THURSO & C. 238 sq. mi.								
D Altnabreac	Mr. G. MacLennan	5	1 0	500	..	34·14	230	193
D Thurso (Buckies)	J. H. M. Davidson, Esq.	5	0 11	240	..	39·74	255	199
Thurso (Holburn Head)	Com'rs. of N. Lighthouses.	5	0 8	68	..	18·94 ?	..	136
Dunnet Head	Com'rs. of N. Lighthouses.	5	1 0	331	..	19·45 ?	217	174
Duncansby Head	Com'rs. of N. Lighthouses.	5	..	196	..	34·22	207	174
4.—FORSS & C. 104 sq. mi.								
D Reay (The Manse)	Rev. Dugald Carmichael	8	1 0	49	..	34·81	265	196
5.—INSULAR. 1 sq. mi.								
Stroma	Com'rs. of N. Lighthouses.	5	3 0	54	..	30·67	195	170
ORKNEY. (Area, 389 sq. mi.)								
Hoy (Cantickhead)	Com'rs. of N. Lighthouses	5	3 10	68	35·5	33·22	..	..
Pentland, Skerries Lighthouse	Com'rs. of N. Lighthouses	5	3 0	70	..	28·83	197	156
Hoy (Graemsay Sound, High)	Com'rs. of N. Lighthouses	5	1 4	29	35·9	38·99	207	193
Hoy (Graemsay Sound, Low)	Com'rs. of N. Lighthouses	8	4 4	40	36·7	36·88	227	185
D Kirkwall (The Bk. of Scotland)	J. Davidson, Esq.	5	1 0	151	..	36·12	248	175
D Pomona (Deerness)	The Meteorological Office	5	1 0	160	35·4	33·94	258	169
Hellyar Holm	Com'rs. of N. Lighthouses	5	1 3	35	..	36·64	270	194
Shapinsay (Balfour Castle)	Mr. W. Liddell	5	0 6	50	31·6	29·69	..	..
Auskerry	Com'rs. of N. Lighthouses	5	1 0	22	..	26·73	226	175
Sanday (Start Point)	Com'rs. of N. Lighthouses	5	1 0	27	32·3	37·04	212	183
North Ronaldshay	Com'rs. of N. Lighthouses	5	0 9	22	..	39·43	248	198
SHETLAND. (Area, 558 sq. mi.)								
D Lerwick (Ft. Charlotte)	The Meteorological Office	8	1 0	54	..	46·41	230	187
D Lerwick Observatory (+A)	The Meteorological Office	8	1 0	269	..	43·90	249	191
D Bixter (Vementry)	Andrew Tait, Esq.	5	1 1	25	..	45·86	232	183
Unst (Baltasound, Halligarth)	Dr. T. E. Saxby	5	1 0	31	..	49·36	284	204

IRELAND.

DIVISION XX.—MUNSTER.

STATIONS.	AUTHORITIES.	Rain-gauge: Diam.	Height of Rim above Ground.	Height of Ground above Sea Level.	Average Rainfall.	1928: Rainfall.	Days with .01 in. or more.	Days with .04 in. or more.
CORK. (Area, 2873 sq. mi.)		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
1.—SHANNON—Left Bank Tributaries. 79 sq. mi.								
2.—DINGLE BAY. 4 sq. mi.								
3.—KENMARE & C. 47 sq. mi.								
4.—BANTRY BAY. 197 sq. mi.								
Bantry House	Mrs. Shelswell-White	5	1 0	25	..	77·14	..	..
D Garinish Island	M. Mackenzie, Esq.	5	1 0	24	..	100·41	230	213
5.—DUNMANUS BAY. 57 sq. mi.								
6.—BANDON & C. 694 sq. mi.								
D Castle Townshend (Glen Barrahane)	Sir M. P. Coghill, Bt....	5	1 3	100	44·7	58·54	235	190
D Castle Townshend (Seafield)	Major H. Chavasse	5	1 0	40	..	63·83	227	195
D Skibbereen (Hollybrook Farm)	C. M. Morgan, Esq.	8	1 6	60	..	74·38	228	207
D Caheragh (The Rectory)	Rev. A. W. Whitley	5	1 0	98	..	73·77	239	205
D Clonakilty (Shannon Vale Ho.)	T. J. Bennett, Esq.	5	1 3	135	..	59·29	216	195
D Kinsale (Scilly House)	J. J. Orr, Esq., M.D.	5	1 0	62	..	57·90	221	183
D Kinsale (Nohoval Rectory)	Rev. H. Hadden	..	..	272	..	57·86	217	193
D Dunmanway (The Rectory)	Rev. Canon A. Wilson	5	1 6	205	61·0	75·98	242	208
7.—CORK HARBOUR. 726 sq. mi.								
d Cork (Cornmarket)	D. J. O'Mahoney, Esq.....	5	1 0	17	..	54·19	..	..
D Cork (University College). (+A)	Prof. H. N. Walsh	5	1 0	65	40·0	55·66	231	182
D Cork (Wellington Road)	R. C. Sikes, Esq., C.E. ...	5	2 2	120	..	56·99	226	187
D Midleton (Ballincurra)	J. H. Bennett, Esq.	8	1 0	24	40·4	52·74	229	191
D Glanmire (Lota Lodge)	No. 1 A. F. Sharman-Crawford, Esq	5	1 0	200	42·6	60·37	251	197
8.—WOMANAGH & C. 118 sq. mi.								
D Roches Point	The Meteorological Office..	8	1 0	22	41·9	56·43	228	196
D Shanagarry (Kinoith)	Miss L. P. Strangman	5	1 0	75	..	46·31	212	165
9.—BLACKWATER. 922 sq. mi.								
D Mallow (Longueville)	R. E. Longfield, Esq.	5	1 0	310	37·3	47·06	244	189
D Mallow (Hazlewood)	E. McLysaght, Esq.	5	0 8	360	..	47·00	220	192
Kanturk (Castlecor)	Mrs. Norton Barry	..	..	..	..	50·01	249	195
10.—SUIR. 3 sq. mi.								
11.—INSULAR. 26 sq. mi.								

DIVISION XX.—MUNSTER—(*con.*).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge: Height of Rim above Ground.	Rain-gauge: Height of Ground above Sea Level.	Average Rainfall.	1928: Rainfall.	1928: Days with ·01 in. or more.	1928: Days with ·04 in. or more.
KERRY. (Area, 1851 sq. mi.)		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
1.—SHANNON—Left Bank Tributaries. 372 sq. mi.								
2.—TRALEE BAY & C. 221 sq. mi.								
Tralee (Technical School)	D. D. O'Sullivan, Esq.	5	30 0	52	..	47·78	..	..
3.—DINGLE BAY. 789 sq. mi.								
D Cahirciveen (Valentia Obs.) (+A)	The Meteorological Office	8	1 0	30	55·7	70·12	269	219
M Gap of Dunloe (Gearhameen)	The Meteorological Office	8	3 0	75	..	123·30	..	..
Killarney (Muckross Garden)	A. R. Vincent, Esq.*	..	..	100	..	75·20	..	..
Killarney (Muckross Lawn)	A. R. Vincent, Esq.*	..	..	100	..	70·30	..	..
D Killarney (Flesk Mills)	J. Lawlor, Esq.*	8	2 6	96	..	69·44	237	208
D Killarney (District Asylum)	E. W. Griffin, Esq., M.D.	5	1 2	173	54·7	60·82	261	205
D Killarney (Lakeview)	Sir M. O'Connell, Bt., M.C.	5	1 0	120	..	73·02	230	205
Killorglin (Callinafercy)	Maj. M. R. Leeson-Marshall	5	1 0	30	..	62·16	..	200
4.—KENMARE & C. 426 sq. mi.								
D Darrynane Abbey	Miss M. O'Connell	5	1 0	13	51·0	65·89	262	220
d Kilgarvan (Inchimore)	Prof. H. N. Walsh	5	1 0	470	..	148·65	..	..
D Kenmare (Dromore Castle)	Lt.-Col. E. Hood	5	1 4	90	65·1	91·89	266	236
D Kenmare (Sheen Falls)	Marquess of Lansdowne	5	0 5	25	..	92·12	266	230
5.—BLACKWATER. 30 sq. mi.								
6.—INSULAR. 13 sq. mi.								
WATERFORD. (Area, 715 sq. mi.)								
1.—BLACKWATER. 243 sq. mi.								
2.—COLLIGAN & C. 259 sq. mi.								
3.—SUIR. 213 sq. mi.								
D Knockaderry Reservoir No. 2.	D. Sheedy, Esq.	5	1 0	248	41·3	65·49	228	177
D Waterford (Brook Lodge)	Miss Bolton	5	1 0	104	39·5	47·66	217	176
D Waterford (Gortmore)	Mrs. N. H. White	5	1 2	137	38·9	47·99	221	176
D Portlaw (Curraghmore Gdns.)	Mr. W. H. Arrowsmith	5	1 0	95	..	69·06 ?	226	187
D Carrick-on-Suir (Seskin)	Louis Grubb, Esq.	8	1 0	542	45·0	56·14	242	185
TIPPERARY. (Area, 1660 sq. mi.)								
1.—SHANNON—Left Bank Tributaries. 582 sq. mi.								
Cappaghwhite (Greenfields Stud)	Mr. P. Schofield	5	1 0	350	..	40·55	..	..
D Nenagh (Traverston)	Miss A. H. Norris	5	1 0	333	45·2	57·88	270	215
D Killaloe (Ballina)	Office of Public Works	5	1 0	126	47·4	55·64	240	200
D Nenagh (St. Mary's Rectory)	Rev. Canon C. W. McDowell	5	1 0	180	..	57·68	221	193
D Nenagh (Castle Lough)	S. Parker-Hutchinson, Esq.	5	1 3	120	39·5	50·78	249	204
D Borrisokane	Shannon Power Dvlopmt.	5	..	200	..	41·20	226	194
Terryglass (Old Court)	M. D. Hickie, Esq.	5	1 0	150	..	43·13	237	196
D Terryglass (Slevoyre)	Gen. Sir W. B. Hickie, K.C.B.	8	1 0	143	..	40·45	222	182

* *Per* Irish Rainfall Association.

DIVISION XX.—MUNSTER—(*con.*).

STATIONS.	AUTHORITIES.	Rain-gauge: Diam.	Height of Rim above Ground.	Height of Ground above Sea Level.	Average Rainfall.	1928: Rainfall.	Days with ·01 in. or more.	Days with ·04 in. or more.
TIPPERARY—(*con.*).		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
2.—BLACKWATER. 21 sq. mi.								
3. SUIR. 965 sq. mi.								
Clonmel (Coolgreany)	Mrs. J. Crean*	8	1 0	100	..	45·63	..	..
D Cahir (Abbey)	Mrs. W. Rochfort	5	1 0	160	39·2	50·18	239	189
D Cashel (Ballinamona)	E. W. M. Murphy, Esq.	5	1 0	262	36·8	42·94	243	181
Thurles (Brittas Castle)	Mrs. Knox*	6	1 0	360	..	35·00 ?	..	..
d Templemore (Barnane)	Capt. A. Carden, R.A.	5	1 0	650	..	54·26	..	205
4.—BARROW—Nore. 92 sq. mi.								
D Roscrea (Timoney Park)	S. Parker-Hutchinson, Esq.	5	1 0	475	36·2	40·36	206	172
LIMERICK. (Area, 1040 sq. mi.)								
1.—SHANNON—Right Bank Tributaries. 7 sq. mi.								
2.—SHANNON—Left Bank Tributaries. 944 sq. mi.								
d Abbeyfeale (Springmount Sch.)	J. F. O'Kelly, Esq.	5	1 0	360	..	48·27	..	164
D Knocklong (Kilfrush)	F. J. B. Gubbins, Esq.	5	1 6	312	..	44·86	239	209
D Foynes (Coolnanes)	Lord Monteagle	5	1 0	50	39·7	50·09	244	201
D Foynes (National School)	W. Purtill, Esq.	5	2 8	15	..	49.89	216	189
Limerick (O'Connell Street)	R. Davison, Esq., C.E.*	5	1 0	51	37·9	43.46	..	186
D Limerick (Mulgrave Street)	Messrs. W. J. Shaw & Sons	5	1 1	60	..	48·33	253	197
Limerick (Boat Club)	W. J. C. Horne, Esq.	5	1 0	50	..	47·63	253	185
D Castleconnell Rectory	Rev. Canon L. G. Davis	5	1 0	88	..	50·05	213	185
3.—BLACKWATER. 64 sq. mi.								
4.—SUIR. 25 sq. mi.								
CLARE (Area, 1270 sq. mi.)								
1.—GALWAY BAY, SOUTH. 100 sq. mi.								
2.—MAL BAY & C. 294 sq. mi.								
D Kilkee (Marine Parade)	R. N. Griffin, Esq.	5	1 6	50	..	53·37	251	209
D Inagh (Mount Callan)	Lt.-Col. F. Tottenham	5	1 0	479	67·2	78·83	232	216
3.—SHANNON—Right Bank Tributaries. 854 sq. mi.								
D O'Briensbridge (The Weir)	Shannon Power Dvlopmt.	5	..	130	..	53·98	243	200
D Dromoland Castle	Lord Inchiquin	5	1 6	45	..	51·80	222	203
D Broadford (Hurdlestown)	Lt.-Col. W. A. Bentley	5	1 0	167	39·7	54·09	254	210
D Tuamgraney (Raheen Ho.)	E. MacLysaght, Esq.	5	1 0	180	..	56·33	240	210
4.—INSULAR. 22 sq. mi.								

* *Per* Irish Rainfall Association.

DIVISION XXI.—LEINSTER.

STATIONS.	AUTHORITIES.	Rain-gauge: Diam.	Height of Rim above Ground.	Height of Ground above Sea Level.	Average Rainfall.	1928: Rainfall.	Days with ·01 in. or more.	Days with ·04 in. or more.
		in.	*ft. in.*	*ft.*	*in.*	*in.*		
WEXFORD. (Area, 902 sq. mi.)								
1.—BARROW. 43 sq. mi.								
2.—OWENDUFF & C. 240 sq. mi.								
D Foulks Mills (Longraigue)	Miss J. Deane	5	1 1	220	39·3	55·50	214	189
3.—SLANEY & C. 467 sq. mi.								
D Johnstown Castle	Lady Maurice Fitzgerald	5	1 0	201	..	50·54	220	174
D Enniscorthy Rectory	Rev. H. C. Lyster	5	1 0	100	..	49·27	231	182
D Enniscorthy (Monksgrange)	Goddard H. Orpen, Esq.	5	1 0	565	49·0	62·55	247	200
Enniscorthy (Woodbrook)	E. C. Blacker, Esq.	5	1 0	370	48·8	65·28	229	..
D Newtownbarry (Weston)	G. T. Lewis, Esq.	5	1 0	153	..	56·09	213	186
4.—OWENAVORRAGH & C. 146 sq. mi.								
D Gorey (Courtown House)	Earl of Courtown	5	3 0	60	34·7	50·62	224	166
5.—OVOCA & C. 6 sq. mi.								
KILKENNY. (Area, 798 sq. mi.)								
1.—SUIR. 162 sq. mi.								
2.—BARROW—Nore. 527 sq. mi.								
D Kilkenny Castle	Earl of Ossory	8	1 6	194	33·1	38·97	234	183
D Castlecomer House	Capt. R. H. Prior-Wandesforde	5	1 0	380	39·6	41·99	227	182
3.—BARROW. 109 sq. mi.								
D Goresbridge (Barraghcore)	Miss M. Fleming	5	1 0	130	..	38·28 ?	237	165
WICKLOW. (Area, 781 sq. mi.)								
1.—BARROW. 12 sq. mi.								
2.—SLANEY. 200 sq. mi.								
D Shillelagh (Coollattin Gardens)	Mr. F. W. Cox	5	0 9	383	41·9	48·52	187	164
3.—OVOCA & C. 241 sq. mi.								
D Rathdrum (Avondale)	A. C. Forbes, Esq.	5	1 0	400	..	60·22	230	183
4.—VARTRY & C. 193 sq. mi.								
D Rathnew, (Clonmannon)	R. H. S. Truell, Esq.	5	1 6	27	33·1	46·81	228	169
D Roundwood (Vartry Lodge)	Dublin Corporation	5	1 8	720	45·0	53·07	226	181
Roundwood	Dublin Corporation*	5	1 8	750	44·6	54·16	..	..
D Newcastle (Killadreenan)	Dr. C. Denys Hanan	8	1 2	256	..	47·66	213	165
D Greystones (Rathdown)	Miss N. G. Moore	5	0 6	160	..	46·33	212	151
D Greystones (Burnaby Lodge)	Capt. C. H. West	5	1 0	95	..	45·66	204	136
5.—LIFFEY & C. 135 sq. mi.								
D Blessington Rectory	Rev. W. Reeves Scully	5	0 8	670	..	44·07	228	191

* *Per* Irish Rainfall Association.

DIVISION XXI.—LEINSTER—(*con.*).

STATIONS.	AUTHORITIES.	Rain-gauge: Diam.	Rain-gauge: Height of Rim above Ground.	Rain-gauge: Height of Ground above Sea Level.	Average Rainfall.	1928: Rainfall.	1928: Days with ·01 in. or more.	1928: Days with ·04 in. or more.
CARLOW. (Area, 346 sq. mi.)		*in.*	*ft. in.*	*ft.*	*in*	*in.*		
1.—BARROW—Nore. 9 sq. mi.								
2.—BARROW. 216 sq. mi.								
D Bagnalstown (Fenagh House)	D.R.P.Beresford,Esq.O.B.E.	5	1 0	340	34·9	43·97	244	173
D Carlow (Belmont)	Capt. E. M. Thomas	5	1 0	191	..	43·31	207	177
D Carlow (Browne's Hill)	Brig.-Gen.R.Browne Clayton	5	1 0	291	34·1	39·86	218	184
3.—SLANEY. 121 sq. mi.								
D Rathvilly (Lisnavagh Gardens)	C. E. Faulkner, Esq.	5	4 0	400	..	44·73	252	201
D Hacketstown Rectory	Rev. C. S. S. Ellison	5	1 2	590	39·5	48·09	255	186
LEIX (QUEEN'S CO.) (Area, 664 sq. mi.)								
1.—SHANNON—Left Bank Tributaries. 25 sq. mi.								
2.—BARROW—Nore. 339 sq. mi.								
D Abbey Leix (Blandsfort)	Late Hum Bland, Esq.	5	1 6	532	36·5	40·42	233	191
D Mountrath (Baunreagh)	J. O'Keeffe, Esq.	5	1 0	810	..	66·38	227	206
3.—BARROW. 300 sq. mi.								
D Carlow (Sunnyside)	E. Shackleton, Esq.	5	1 0	178	33·2	44·56	223	175
D Mountmellick (Summer Grove)	W. A. Robinson, Esq.	5	1 0	252	..	47·74	237	198
OFFALY (KING'S CO.) (Area, 772 sq. mi.)								
1.—SHANNON—Left Bank Tributaries. 560 sq. mi.								
D Birr Castle	Earl of Rosse	8	1 0	175	32·6	40·00	277	177
D Meelick (Victoria Lock)	Office of Public Works.	5	1 0	121	29·9	35·97	251	180
d Banagher	Shannon Power Dvlopmt.	5	..	130	..	39·18 ?	..	172
D Tullamore(St.Catherine's Rect.)	The Very Rev. R. S. Craig	5	1 6	201	32·6	34·07	228	169
D Tullamore(St. Vincent's Hosp.)	Dr. G. A. Moorhead	5	1 0	225	..	39·76	280	189
D Ferbane (Turraun Peat Works)	Leinster Carbonizing Co.	8	1 2	165	..	36·26	212	177
D Ballycumber (Bellair Ho.)	Mrs. F. B. Mulock	5	..	290	..	42·95	230	191
2.—BARROW—Nore. 5 sq. mi.								
3.—BARROW. 156 sq. mi.								
Edenderry (Tubberdaly Ho.)	J. Murphy, Esq.	5	1 0	330	..	39·73	..	..
4.—BOYNE. 51 sq. mi.								
KILDARE. (Area, 654 sq. mi.)								
1.—BARROW. 332 sq. mi.								
2.—LIFFEY. 246 sq. mi.								
D Straffan House	F. B. Barton, Esq.	5	1 0	256	31·4	35·93	213	178
Clongowes Wood College	Rev. J. Hyland, S.J.*	..	..	246	..	36·66	..	..
3.—BOYNE. 76 sq. mi.								

* *Per* Irish Rainfall Association.

DIVISION XXI.—LEINSTER—(*con.*).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge: Height of Rim above Ground.	Rain-gauge: Height of Ground above Sea Level.	Average Rainfall.	1928: Rainfall.	1928: Days with ·01 in. or more.	1928: Days with ·04 in. or more.
DUBLIN. (Area, 354 sq. mi.)		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
1.—VARTRY & C. 23 sq. mi.								
D Shankill (Sherrington)	Lt.-Col. J. C. W. Erck	5	1 0	115	..	33·31	190	137
d Carrickmines (Claremount)	John O. B. Read, Esq.	5	0 11	300	30·6	36·96	..	134
D Killiney (Rathleigh)	H. R. Maunsell, Esq.	5	1 0	..	..	31·54	188	128
2.—LIFFEY & C. 188 sq. mi.								
D Stillorgan (Vartry Res.)	Dublin Corporation	5	1 4	278	..	33·68	190	156
D Stillorgan (Farmleigh)	T. Jackson, Esq.	5	1 1	220	..	37·63	237	170
D Kingstown (Harbour Yard)	Office of Public Works	8	1 0	52	28·3	36·03	176	157
D Rathfarnham Castle	Rev. M. C. Pelley, S.J.	8	1 0	175	..	30·88	217	149
D Belgard Castle	Capt. A. F. Maude	5	1 6	400	..	29·47	209	161
D Rathmines (Neville Road)	T. H. Mason, Esq.	5	1 0	100	..	31·68	198	161
D Donnybrook (Anglesea Road)	F. C. D. Joynt, Esq.	5	1 0	30	..	32·92	215	151
d Clondalkin (Cheeverstown)	Miss M. Love	5	1 4	350	..	(27·51)	..	..
D Dublin (FitzWilliam Square)	Sir J. W. Moore, M.D.	8	1 6	54	27·4	28·70	217	152
D Dublin (Ringsend Pumpg. Stn.)	G. S. Harty, Esq., C.E.	10	1 1	25	..	28·32	200	151
D Dublin (Trinity College)	Prof. W. E. Thrift	8	1 0	12	26·1	27·31	203	146
D Dublin (Phoenix Park)	Ordnance Survey Office	8	1 0	155	27·6	31·11	207	159
Lucan (Peamount San.)	Medical Officer	5	5 9	366	..	31·66	..	..
D Clontarf (Pumping Station)	G. S. Harty, Esq., C.E.	5	1 0	5	..	26·88	198	132
D Glasnevin (Botanic Gdns.)	The Director	8	1 0	55	27·9	(30·36)	(225)	(150)
D Howth Castle	J. Gaisford St. Lawrence, Esq.	5	1 9	35	..	31·65	189	145
3.—NANNY, DELVIN & C. 142 sq. mi.								
D Malahide (Seamount)	J. G. Jameson, Esq.	5	1 0	150	..	33·36	214	162
Malahide (St. Andrews)	Ven. Archdeacon T. S. Lindsay	5	1 3	100	..	32·34	..	163
D Lusk (Nevitt)	W. Monks, Esq.	5	1 0	139	..	34·00	238	161
D Skerries (Milverton Hall)	Capt. E. G. Woods	5	1 0	190	28·0	29·03 ?	220	168
D Balbriggan (Ardgillan)	No. 1 Capt. E. R. Taylor	5	1 0	210	29·0	34·95	227	168
4.—INSULAR. 1 sq. mi.								
D Lambay Island	Lord Revelstoke	5	1 0	20	27·4	30·29	183	147
MEATH. (Area, 909 sq. mi.)								
1.—SHANNON—Left Bank Tributaries. 32 sq. mi.								
2.—LIFFEY & C. 72 sq. mi.								
D Dunboyne (Stirling, Clonee)	Mr. J. Pilkington	8	1 0	231	33·3	36·50	230	177
3.—NANNY, DELVIN & C. 150 sq. mi.								
4.—BOYNE. 560 sq. mi.								
D Summerhill House	Mr. W. Lauder	5	1 0	372	33·7	39·30	221	180
D Dunsany Castle Gardens	Mr. J. B. Pow	5	1 0	323	..	39·74	217	173
D Athboy (Frankville)	Mrs. C. P. Coghill	8	1 3	227	35·5	50·02 ?	226	215
D Beauparc (St. Cloud)	W. J. Hopkins, Esq.	5	1 0	215	..	35·95	222	174
D Kells (Headfort)	The Marquis of Headfort	8	0 8	227	37·0	46·52	239	195
5.—DUNDALK BAY. 95 sq. mi.								

DIVISION XXI.—LEINSTER—(*con.*).

STATIONS.	AUTHORITIES.	Diam.	Rain-gauge Height of Rim above Ground.	Rain-gauge Height of Ground above Sea Level.	Average Rainfall.	1928 Rainfall.	1928 Days with ·01 in. or more.	1928 Days with ·04 in. or more.
WESTMEATH. (Area, 712 sq. mi.)		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
1.—SHANNON—Left Bank Tributaries. 517 sq. mi.								
D Athlone	Office of Public Works ...	5	1 0	132	28·2	41·89 ?	216	198
Athlone (Twyford House)	J. P. Hodson, Esq.*	5	1 0	187	37·0	46·92	..	..
D Streamstown (Windmill)	F. W. Jeeves, Esq.	5	1 6	..	..	41·25	215	190
D Moate (Coolatore)	H. A. S. Upton, Esq.	5	1 6	369	36·0	39·20	258	189
D Mullingar (Belvedere House)	Mr. J. Bayliss	5	1 0	367	36·3	44·80	235	180
D Mullingar (Ballynegall Gardens)	Major Hawkesworth Smyth	5	1 3	340	39·0	47·94	241	202
D Rathowen (Cromlyn)	(R)Maj.-Gen. J.P.Battersby,C.B.	8	1 6	298	36·1	46·58	242	194
D Castlepollard (Pakenham Hall)	Mr. W. Mitchison.....	5	4 6	..	..	44·67	226	182
2.—BOYNE. 195 sq. mi.								
LOUTH. (Area, 316 sq. mi.)								
1.—BOYNE. 32 sq. mi.								
2.—DUNDALK BAY & C. 264 sq. mi.								
D Dundalk Rectory	Rev. T. F. Campbell.....	5	1 0	10	..	40·37	245	176
Dundalk (Ballymacallet Mt.)	*old g* M. Sellars, Esq., C.E.	5	2 3	670	..	38·57	..	..
d Dundalk (Ballymacallet Mt.)	*new g* †M. Sellars, Esq., C.E....	5	2 3	670	..	51·53	..	..
D Dundalk (Aughneskea Res.)	M. Sellars, Esq., C.E.	5	1 3	207	..	47·64	214	177
3.—CARLINGFORD LOUGH. 20 sq. mi.								
D Greenore	S. Wilson, Esq.	5	1 0	20	31·9	38·68	207	159
LONGFORD. (Area, 424 sq. mi.)								
1.—ERNE. 61 sq. mi.								
2.—SHANNON—Left Bank Tributaries. 363 sq. mi.								
D Ballymahon (New Castle)	Col. W.A.King-Harman ..	5	1 0	200	36·7	42·40	239	187
Longford (The Rectory)	Rev. H. Justice	5	1 0	185	..	46·56	234	195
D Cloondrah	Office of Public Works ...	5	1 0	132	..	34·89 ?	245	172
D Castle Forbes Gardens	The Earl of Granard.....	8	1 0	161	37·6	46·45	236	193

DIVISION XXII.—CONNAUGHT.

GALWAY. (Area, 2377 sq. mi.)								
1.—ERIFF & C. 141 sq. mi.								
2.—GALWAY BAY NORTH. 277 sq. mi.								
3.—CORRIB. 846 sq. mi.								
D Galway (Grammar School)	T. W. Hall, Esq.	5	1 0	50	..	54·28	257	192
D Ballynahinch Castle	H.H. Maharaja of Nawanagar	5	1 9	41	61·0	81·48	263	235
Tuam (Gardenfield)	R. J. Kirwan, Esq., C.E. ..	5	1 0	155	44·1	54·07	..	..
D Portumna	Shannon Power Dvlopmt..	5	2 2	..	..	38·61	212	185
4.—GALWAY BAY, SOUTH. 281 sq. mi.								

* *Per* Irish Rainfall Association.

† New site.

DIVISION XXII.—CONNAUGHT—(*con.*).

STATIONS.	AUTHORITIES.	Rain-gauge Diam.	Height of Rim above Ground.	Height of Ground above Sea Level.	Average Rainfall.	1928 Rainfall.	Days with ·01 in. or more.	Days with ·04 in. or more.
GALWAY—(*con.*)		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
5.—SHANNON—Right Bank Tributaries. 803 sq. mi.								
Killimor (Ramore)	Miss N. MacDermott	5	1 0	220	..	42·58	194	181
D Ballinasloe B.N.S.	Shannon Power Develop.	5	..	150	..	44·92	237	199
d Ahascragh (Clonbrock) (*new g*)	The Hon Miss Dillon	5	1 0	198	41·6	(49·69)	..	..
D Mt. Bellew B.N.S.	Shannon Power Dvlopmt.	5	..	200	..	54·65	237	203
Glenamaddy	Shannon Power Dvlopmt.	..	..	..	..	56·60	..	..
d Ballymacurly (Highlake)	Shannon Power Dvlopmt.	5	..	350	..	(51·44)	(220)	(193
6.—INSULAR. 29 sq. mi.								
ROSCOMMON. (Area, 961 sq. mi.)								
1.—SLIGO BAY. 6 sq. mi.								
2.—MOY. 11 sq. mi.								
3.—CORRIB. 16 sq. mi.								
4.—SHANNON—Right Bank Tributaries. 928 sq. mi.								
D Strokestown (Castlenode)	W. J. Walpole, Esq.	5	1 0	160	35·0	47·70	206	185
D Tulsk	Shannon Power Dvlopmt.	5	..	250	..	48·82	197	183
d Ballaghadereen	Shannon Power Dvlopmt.	5	..	250	..	(47·01)	..	..
D Jamestown (Albert Lock)	Office of Public Works	5	1 0	146	..	27·90 ?	204	160
D Boyle	Shannon Power Dvlopmt.	5	..	250	..	44·38	222	193
d Keadew	Shannon Power Dvlopmt.	..	..	..	..	(55·81)	..	..
MAYO. (Area, 2149 sq. mi.)								
1.—SLIGO BAY. 10 sq. mi.								
2.—MOY & C. 797 sq. mi.								
D Castlebar Rectory	Rev. J. Jackson	5	1 8	145	..	63·66	253	219
3.—BLACKSOD BAY & C. 411 sq. mi.								
D Blacksod Point	Meteorological Office	8	1 0	10	49·7	58·94	267	217
4.—CLEW BAY. 254 sq. mi.								
D Westport House	The Marquess of Sligo	5	1 0	35	46·6	54·35	259	205
D Mallarany	M. C. Forbes, Esq.	5	1 0	120	..	78·70	257	227
5.—ERIFF & C. 121 sq. mi.								
D Aasleagh Rectory	Rev. F. T. Cockle	5	1 0	30	..	119·51	263	233
D Aasleagh House	The Marquess of Sligo	5	1 0	30	87·0	124·14	260	235
D Delphi Lodge	The Marquess of Sligo	5	1 0	110	99·0	118·21	264	242
6.—CORRIB. 432 sq. mi.								
D Tourmakeady (Drimbawn Ho.)	Capt. E. G. Woods	5	1 6	100	..	70·04	240	190
7.—SHANNON—Right Bank Tributaries. 35 sq. mi.								
8.—INSULAR. 89 sq. mi.								
SLIGO. (Area, 716 sq. mi.)								
1.—DROWES & C. 49 sq. mi.								

DIVISION XXII.—CONNAUGHT—(*con.*).

STATIONS.	AUTHORITIES.	Rain-gauge Diam.	Height of Rim above Ground.	Height of Ground above Sea Level.	Average Rainfall.	1928 Rainfall.	Days with ·01 in. or more.	Days with ·04 in. or more.
SLIGO—(*con.*)		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
2.—SLIGO BAY. 444 sq. mi.								
D Collooney (Markree Obsy.)	J. R. Armstrong, Esq.	5	1 0	122	43·5	54·87	253	216
D Sligo (Ard-na-veagh)	R. J. Kirwan, Esq., C.E.	5	1 0	90	..	53·07	256	216
3.—MOY & C. 166 sq. mi.								
4.—SHANNON—Right Bank Tributaries. 56 sq. mi.								
5.—INSULAR.—1 sq. mi.								
LEITRIM. (Area, 615 sq. mi.)								
1.—ERNE. 152 sq. mi.								
2.—DROWES & C. 85 sq. mi.								
3.—SLIGO BAY. 135 sq. mi.								
4.—SHANNON—Right Bank Tributaries. 47 sq. mi.								
5.—SHANNON—Left Bank Tributaries. 196 sq. mi.								
Drumkeeran (Leckawn)	Shannon Power Dvlopmt..	5	..	350	..	70·37	..	196
D Ruskey	Office of Public Works	5	1 0	141	..	37·73 ?	228	211
D Drumshanbo(LoughAllenSluice)	Office of Public Works	5	1 0	169	..	39·96 ?	270	167

DIVISION XXIII.—ULSTER.

CAVAN. (Area, 753 sq. mi.)								
1.—ERNE. 489 sq. mi.								
D Crossdoney (Kevit Castle)	F. P. Smith, Esq.	5	1 0	211	..	45·41	232	181
d Killeshandra (Castle Hamilton)	Major W. J. Hamilton	5	1 0	300	..	48·28	..	177
D Belturbet (Cloverhill)	Miss M. L. Gee	5	1 0	202	34·6	39·94	247	179
d Glangevlin	Shannon Power Dvlopmt..	5	..	400		79·46	..	195
2.—SHANNON—Right Bank Tributaries. 34 sq. mi.								
3.—SHANNON—Left Bank Tributaries. 91 sq. mi.								
4.—BOYNE. 122 sq. mi.								
5.—DUNDALK BAY. 17 sq. mi.								
FERMANAGH. (Area, 713 sq. mi.)								
1.—ERNE. 667 sq. mi.								
D Enniskillen (Castle Coole)	Lady Dorothy Lowry-Corry	5	1 0	240	..	51·93	259	201
d Enniskillen (Technical School)	J. W. Mansfield, Esq.	5	0 10	165	..	49·62	..	..
d Enniskillen (Portora School)	H. S. Scales, Esq.	5	1 0	251	40·3	51·51	..	..
D Belleek (Heronshaw)	T. Beacom, Esq.	5	1 2	150	45·5	53·30	239	218
2.—DROWES & C. 46 sq. mi.								
MONAGHAN. (Area, 498 sq. mi.)								
1.—ERNE. 208 sq. mi.								
2.—DUNDALK BAY. 132 sq. mi.								

DIVISION XXIII.—ULSTER—(*con.*).

STATIONS.	AUTHORITIES.	Rain-gauge: Diam.	Height of Rim above Ground.	Height of Ground above Sea Level.	Average Rainfall.	1928: Rainfall.	Days with .01 in. or more.	Days with .04 in. or more.
MONAGHAN—(*con.*)		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
3.—BANN—Lough Neagh, West. 158 sq. mi.								
D Monaghan (Workhouse)	Dr. J. Campbell Hall	5	1 0	240	31·4	50·46	250	188
ARMAGH (Area, 514 sq. mi.)								
1.—DUNDALK BAY. 118 sq. mi.								
Crossmaglen (Anamar)	P. Norris, Esq.	5	1 1	384	..	46·80	214	179
2.—CARLINGFORD LOUGH. 23 sq. mi.								
D Bessbrook (The Woodhouse)	J. S. W. Richardson, Esq.	5	1 0	260	..	49·44	238	197
3.—BANN—Lough Neagh, East. 37 sq. mi.								
D Lurgan (Belle Vue)	S. A. Bell, Esq., J.P.	5	0 5	200	29·7	36·69	223	176
4.—BANN, UPPER. 144 sq. mi.								
5.—BANN—Lough Neagh, West. 192 sq. mi.								
D Armagh Observatory	(+A)The Meteorological Office	8	1 0	204	31·7	40·78	230	184
D Richhill (Sandymount)	Mrs. C. B. Lamb	5	1 6	200	..	36·88	230	188
DOWN. (Area, 961 sq. mi.)								
1.—CARLINGFORD LOUGH. 104 sq. mi.								
D Newry (Bridge Street House)	C. Blaney, Esq.	5	1 0	23	38·1	50·86	202	183
2.—DUNDRUM BAY & C. 173 sq. mi.								
D Annalong (Belfast W.W.)	C. F. Wheeler, Esq., C.E.	5	2 9	435	..	62·18	264	187
D Mourne Mount'ns (Fofanny Res.)	J. H. H. Swiney, Esq., C.E.	5	1 0	938	..	103·61	228	203
D Seaforde	T. W. Forde, Esq.	8	0 5	180	38·3	51·75	241	210
3.—STRANGFORD LOUGH. 260 sq. mi.								
D Saintfield House	Rev. E. H. Blackwood Price	5	0 9	300	..	46·03	272	195
4.—COAST STREAMS. 47 sq. mi.								
D Donaghadee (Coastguard Stat.)	The Meteorological Office	8	1 0	40	31·3	43·31	229	171
D Donaghadee (Craigmore)	Dr. S. B. Coates	5	1 0	60	..	41·99	239	169
5.—BELFAST LOUGH. 206 sq. mi.								
D Waringstown (The Forge)	W. J. Gibson, Esq.	5	1 0	187	..	37·14	231	178
Bangor (Chorlton)	C. T. Ingold, Esq.	7	1 6	60	..	44·01	..	..
6.—BANN—Lough Neagh, East. 7 sq. mi.								
7.—BANN, UPPER. 162 sq. mi.								
D Banbridge (Observatory)	H. D. Fleming, Esq.	5	1 6	210	..	37·63	221	173
d Banbridge (Milltown)	J. E. Kennedy Esq.	5	1 0	200	31·0	34·05	230	171
D Portadown (Moyallon House)	Mr. J. Lynas	5	0 7	130	32·6	36·63	225	183
8.—INSULAR. 2 sq. mi.								

DIVISION XXIII.—ULSTER—(*con.*).

STATIONS.	AUTHORITIES.	Rain-gauge Diam.	Height of Rim above Ground.	Height of Ground above Sea Level.	Average Rainfall.	1928 Rainfall.	Days with .01 in. or more.	Days with .04 in. or more.
ANTRIM. (Area, 1193 sq. mi.)		*in.*	*ft. in.*	*ft.*	*in.*	*in*		
1.—BELFAST LOUGH. 107 sq. mi.								
D Lisburn (Friend's School)	J. Woolman, Esq.	8	1 6	208	..	39·12	235	189
D Lambeg (Glenmore House)	Linen Industry Res. Assn.	8	0 11	100	..	39·47	228	188
D Dunmurry (Warren House)	Col. H. R. Charley	5	0 10	110	..	42·31	241	190
D Belfast (Queen's University)	J. A. Badger, Esq.	5	1 0	62	34·6	45·19	217	180
D Belfast (Royal Acad. Inst.)	J. W. Darbyshire, Esq.	5	1 0	13	..	45·94	234	183
Belfast (Sewage Works)	R. B. Donald, Esq., C.E.	8	1 0	26	..	43·02	..	..
D Belfast (Cave Hill Road)	Miss C. Firth	5	1 0	200	..	49·06	268	200
D Belfast (Oldpark Filters)	C. F. Wheeler, Esq., C.E.	5	3 6	203	..	49·76	224	184
D Whiteabbey (Knockinagh)	H. Chisholm, Esq.	5	1 0	200	..	46·99	234	189
D Carrickfergus (Dorisland)	C. F. Wheeler, Esq., C.E.	5	3 7	225	37·7	43·91 ?	218	179
D Carrickfergus (South Woodburn)	C. F. Wheeler, Esq., C.E.	5	3 0	640	41·9	50·88	233	198
D Carrickfergus (North Woodburn)	C. F. Wheeler, Esq., C.E.	5	3 0	737	45·4	50·88	231	196
D Carrickfergus (Copeland) *old g.*	C. F. Wheeler, Esq., C.E.	5	3 0	424	37·7	49·37	235	184
D Carrickfergus (Copeland) *new g*	C. F. Wheeler, Esq., C.E.	5	1 0	427	..	50·04	242	194
D Carrickfergus (Lough Mourne)	C. F. Wheeler, Esq., C.E.	5	3 0	596	42·0	52·82	230	194
2.—GLENARM & C. 186 sq. mi.								
D Larne (Sallagh Springs)	J. H. H. Swiney, Esq., C.E.	5	1 0	566	..	68·57	229	208
D Glenarm Castle	Mr. T. Daly	5	1 4	30	44·6	66·65	237	221
3.—BUSH & C. 193 sq. mi.								
D Ballycastle (Magherintemple)	Capt. J. Casement, D.S.O.	5	1 0	230	..	49·20	242	197
D Ballycastle (Sheskburn)	Rev. E. F. Campbell	5	0 11	10	..	45·86	258	208
4.—BANN, LOWER. 112 sq. mi.								
5.—BANN—Lough Neagh, East. 590 sq. mi.								
D Stoneyford (Belfast W.W.)	C. F. Wheeler, Esq., C.E.	5	1 6	450	35·7	39·85	212	186
D Aldergrove Aerodrome	The Meteorological Office.	8	1 0	238	..	41·01	233	188
D Ballymena (Harryville)	J. R. Williams, Esq.	5	1 5	150	41·5	52·61	244	217
D Broughshane (Tullymore Sch.)	E. W. Thomson, Esq.	5	1 2	218	..	50·52	238	197
D Broughshane (Quolie)	H. O'Hara, Esq., C.E.	5	1 3	864	47·3	54·63	249	199
6.—INSULAR. 5 sq. mi.								
LONDONDERRY. (Area, 816 sq. mi.)								
1.—LOUGH SWILLY. 6 sq. mi.								
D Londonderry (Dunruadh)	J. H. Welch, Esq.	5	1 0	150	..	52·79	251	212
2.—BUSH & C. 9 sq. mi.								
3.—BANN, LOWER. 240 sq. mi.								
D Coleraine (Cutts House)	Maxwell Given, Esq., C.E.	8	1 0	20	..	48·29	242	194
4.—BANN—Lough Neagh West. 196 sq. mi.								
5.—FOYLE & C. 365 sq. mi.								
M Glenedra (Spelhoagh Mountain)	M. A. Robinson, Esq., C.E.	5	1 0	1333	..	84·78	..	..
D Glenedra Hill	M. A. Robinson, Esq., C.E.	5	1 0	1333	..	79·44	253	226
D Glenedra Lodge (+A)	M. A. Robinson, Esq., C.E.	5	1 0	950	..	76·48	254	225
‡M Glenedra (Altagarran Mountain)	M. A. Robinson, Esq., C.E.	5	1 0	1230	..	69·86	..	..
D Londonderry (Creggan Res.)	Mr. W. Hutchinson	8	1 0	325	41·8	55·50	280	235
D Limavady (Roevista Manse)	Rev. W. Browne	5	1 0	70	..	42·01	219	186
Limavady (Drenagh)	M. M. McCausland, Esq.	5	1 6	80	37·0	41·74	245	190
Bellarena	Sir F. G. Heygate, Bt.	5	2 6	12	38·4	45·98	236	210

‡ Gauge overexposed on moor.

DIVISION XXIII.—ULSTER—(*con.*).

STATIONS.	AUTHORITIES.	Rain-gauge: Diam.	Height of Rim above Ground.	Height of Ground above Sea Level.	Average Rainfall.	1928: Rainfall.	Days with ·01 in. or more.	Days with ·04 in. or more.
TYRONE. (Area, 1257 sq. mi.)		*in.*	*ft. in.*	*ft.*	*in.*	*in.*		
1.—ERNE. 46 sq. mi.								
2.—BANN—Lough Neagh, West. 442 sq. mi.								
D Dungannon (Aloha)	Major R. Stevenson	5	1 0	275	..	49·08	247	190
D Donaghmore	D. Brown, Esq.	5	1 3	260	..	52·62	223	196
3.—FOYLE. 769 sq. mi.								
D Omagh (Edenfel)	Lt.-Col. J. B. Buchanan	8	1 0	280	40·1	54·55	252	200
D Newtown Stewart (Barons Ct.)	Robert Bell, Esq.	5	1 0	250	..	56·31	258	204
D Sion Mills (Sion House)	Capt. J. C. Herdman	5	1 0	100	..	53·06	245	203
DONEGAL. (Area, 1875 sq. mi.)								
1.—DONAGH & C. 146 sq. mi.								
D Malin Head	The Meteorological Office	8	1 3	51	..	47·16	237	190
2.—LOUGH SWILLY. 273 sq. mi.								
d Rathmullen (Fort Royal)	Col. J. H. Jellett	5	1 4	35	..	54·43	..	..
3.—SHEEPHAVEN & C. 307 sq. mi.								
D Milford (The Manse)	Rev. W. J. Young	5	1 3	150	42·0	53·07	262	222
D Dunfanaghy (St. Patrick's)	W. T. Arnold, Esq.	..	..	..	..	52·12	267	219
4.—GWEEBARRA & C. 341 sq. mi.								
5.—DONEGAL BAY. 322 sq. mi.								
D Killybegs (Rockmount)	Com. G. G. Philipps, R.N.	5	1 0	65	60·5	71·00	264	224
6.—ERNE.—68 sq. mi.								
7.—DROWES & C. 10 sq. mi.								
8.—FOYLE. 396 sq. mi.								
9.—INSULAR. 12 sq. mi.								

BRITISH RAINFALL,

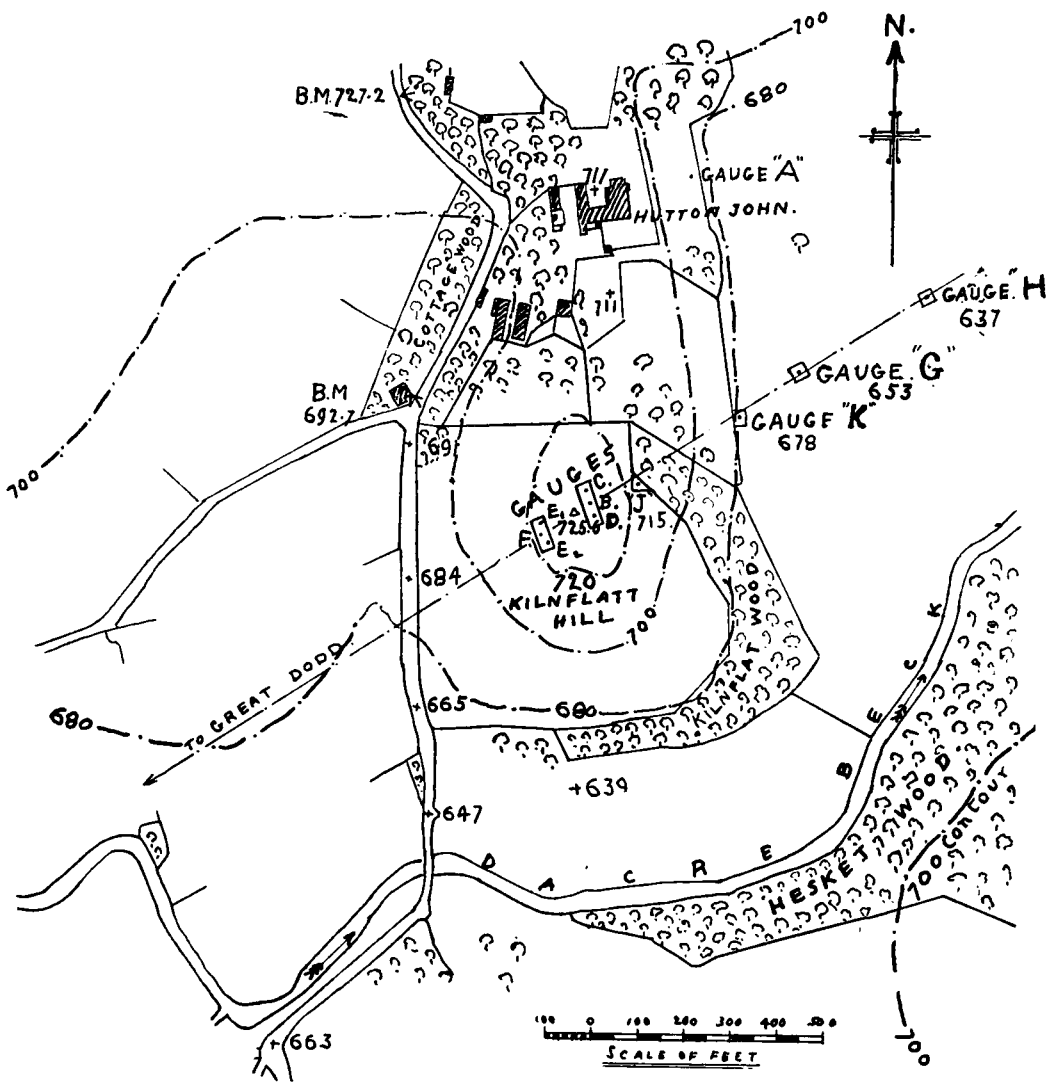
1928.

PART IV.

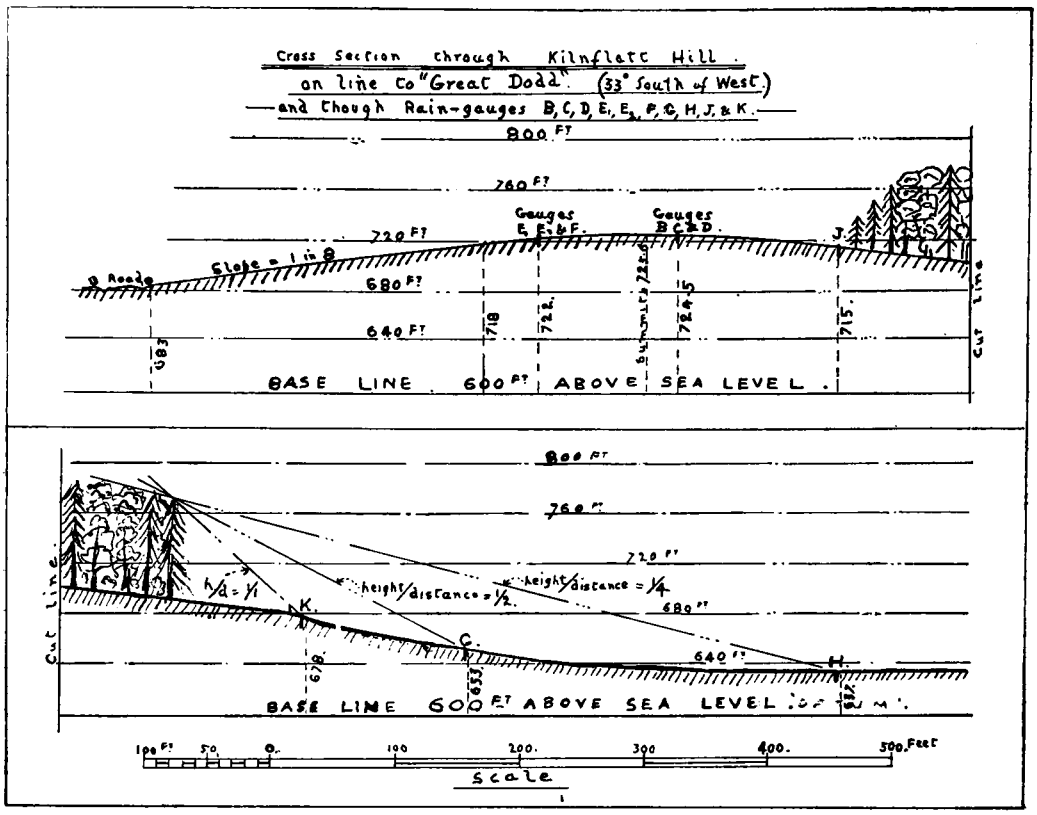
REPORT ON EXPERIMENTS WITH RAIN-GAUGE SHIELDS AND RAIN-GAUGES UNDER THE LEE OF A HIGH WOOD DURING THE PERIOD 1st MAY, 1928, TO 30th APRIL, 1929, AT HUTTON JOHN, PENRITH.

By F. Hudleston, M.Inst.C.E.

The experiments with the third installation of shielded rain gauges in an exposed position, and with certain other unshielded gauges to leeward of a high wood, of which a detailed description appeared on page 288 of *British Rainfall*, 1927, have been continued for twelve consecutive months (1st May, 1928—30th April, 1929) and two other gauges (called J. & K.) were installed in November, 1928, on either side of the wood, in order to obtain further evidence upon the behaviour of the two normally exposed gauges G and H, which were first set up



Map showing contours in neighbourhood of Kilnflatt Hill, and positions of Rain-gauges.


Cross Section through Kilnflatt Hill
on line to "Great Dodd" (33° South of West)
and though Rain-gauges B, C, D, E, E2, F, G, H, J & K.
800 FT
760 FT
720 FT
680 FT
640 FT
Gauges E, E2 & F.
Gauges B C & D.
Slope = 1 in 8
Road
Cut Line
BASE LINE 600 FT ABOVE SEA LEVEL
height/distance = 1/4
height/distance = 1/2
BASE LINE 600 FT ABOVE SEA LEVEL
100 FT 50 0 100 200 300 400 500 Feet
Scale

in April, 1928, in the park to the north-east of Kilnflatt Wood. A contoured map showing the position and surroundings of all eleven gauges, and a cross section of the hill along the direction of the prevailing wind are given above. The ten experimental gauges are set up along this line.

Gauge A is the standard gauge at the old established site in the gardens to the east of Hutton John. It is 5 yards west of a retaining wall 7 ft. high, which divides the lower lying park land on the east from the gardens. Gauges B, C and D are shown in the eastern enclosure just east of the crest of Kilnflatt Hill. B is normally exposed, C is surrounded by a circular turf wall, 1 ft. high, 10 ft. in diameter at the crest of the wall. The inner face of the wall is almost vertical while the outer face is built at 1 vertical to 3 horizontal, and carefully sodded to make it a smooth grass slope. D has a similar turf wall 1 ft. 3 in. high. Gauges E_1, E_2, and F are in the western enclosure on the western side of the hill, the amount of the slope being 1 in 8 downwards to W.S.W. approximately ; F is normally exposed and is placed 14 ft. in advance of gauges E_1 and E_2, to avoid possible disturbance from the turf walls surrounding those gauges. The crests of these two turf walls are in planes passing through the gauge lips, but the crest of the wall round E_1 is exactly level, while that round E_2 is parallel to the sloping surface of the hillside, which is here merging into the rounded summit of the

Summary of Catches for 12 *months from* 1*st May*, 1928, *to* 30*th April*, 1929.

NOTE.—The italic figures are the percentages of " A's " catches.

	No. of Days.	Check Gauge	Western Enclosure.			Eastern Enclosure.			Close to the Wood.		In the Park.		Wind Direction and Force.
		A	E_1	E_2	F	B	C	D	J	K	G	H	
(*a*) Westerly Winds of 20-50 m.p.h. during May–October.	14	ins. 7·20 *100*	ins. 6·56 *91*	ins. 6·36 *88*	ins. 6·16 *85*	ins. 7·12 *99*	ins. 7·30 *101*	ins. 7·35 *102*	ins. — —	ins. — —	ins. 7·11 *99*	ins. 7·01 *97*	S.W. to W. of 20–50 m.p.h.
(*b*) Westerly Winds during November, 1928, to April, 1929.	18	7·18 *100*	5·88 *82*	5·74 *80*	5·35 *74*	6·94 *97*	7·05 *98*	7·04 *98*	7·33 *102*	4·95 *69*	7·03 *98*	6·85 *95*	S.W. to W.N.W. of 20–50 m.p.h.
(*c*) Twelve months' total for strong Westerly Winds	32	14·38 *100*	12·44 *86*	12·10 *84*	11·51 *80*	14·06 *98*	14·35 *100*	14·39 *100*	— —	— —	14·14 *98*	13·86 *96*	S.W. to W.N.W. of 20–50 m.p.h.
(*d*) Catches of *Sleet* on 16th December, 1928	1	0·23 *100*	0·31 *135*	0·29 *126*	0·19 *83*	0·22 *96*	0·30 *130*	0·32 *140*	0·22 *96*	0·20 *87*	0·21 *91*	0·22 *96*	S. by W. Force 4 to 5.
(*e*) Catches of *Snow* on 24th February, 1929	1	0·05 *100*	0·10 *200*	0·11 *220*	0·06 *120*	0·05 *100*	0·10 *200*	0·10 *200*	0·05 *100*	0·02 *40*	0·04 *80*	0·06 *120*	E. by S. Force 2–3.
(*f*) Catches during *Blizzard* on 30th December, 1928	1	0·21 *102*	0·25 *119*	0·25? *119?*	0·23 *109*	0·16 *76*	0·20 *95*	0·21 *100*	0·08 *40*	0·08 *40*	0·11 *52*	0·19 *90*	N.E. Force 4–5.
(*g*) " All other days."	153	29·85 *100*	29·77 *100*	29·78? *100*	28·94 *97*	30·18 *101*	30·76 *103*	30·73 *103*	— —	— —	29·81 *100*	29·52 *99*	From all points and not more than Force 3.
Totals for the 12 months.	188	44·72	42·87	42·53	40·93	44·67	45·71	45·75	—	—	44·31	43·85	
(188 days of at least 0·01 in. and 131 days of at least 0·04 in.)		*100*	*96*	*95*	*92*	*100*	*102*	*102*	—	—	*99*	*98*	

hill, so that the western edge of E_2's crater is $4\frac{1}{2}$ in. *lower* than the actual lip of the gauge while the eastern edge is $4\frac{1}{2}$ in. *above* it. Gauge J is close to the western side of the wood and is 10 ft. 6 in. lower than the top of the hill ; K is on the eastern side of the wood where the ratio of shelter (i.e., height/distance) is 1 to 1 ; G is placed to obtain a ratio of h/d=1 to 2, while H has a ratio of 1 to 4. These four gauges are normally exposed.

The *scale* of these ratios of shelter is large. The rounded top of the wood is about 785 ft. above sea level. K has $h/d=\frac{105 \text{ ft.}}{105 \text{ ft.}}$, G has $h/d=\frac{130 \text{ ft.}}{260 \text{ ft.}}$, while H has its $h/d=\frac{148 \text{ ft.}}{590 \text{ ft.}}$. The exact positions of gauges K, G and H were determined by a clinometer to give the fractional ratios we decided to adopt.

The check gauge A in the gardens has a shelter ratio of approximately 1 to 2 for all points between south and north-west.

The table on page 260 summarises the catches of the 12 months in eight double lines, the top line in each case gives each catch in inches, while the italics of the lower line gives that catch as a percentage of A's catch.

Line (*a*) gives the total catches of 14 summer days in May—October, 1928, with westerly winds between 20 and 50 m.p.h. ; line (*b*) gives the same information for 18 winter days during November, 1928, to April, 1929, when the variations are distinctly greater ; line (*c*) gives the grand totals for the above 32 days ; line (*d*) gives the catches for one day when precipitation was all in the form of *sleet*, and the wind fairly strong ; line (*e*) gives the results of a day's *snowfall* with a light wind ; line (*f*) gives the results of a " *blizzard* " ; line (*g*) gives " all other days " ; while line (*h*) is the total of the twelve months.

It will be noticed at once from line (*g*) which deals with the ordinary uneventful rainy weather on 153 days that most of the gauges are practically equal in catching capacity, although F on the hillside is definitely low, while C and D on the hilltop are definitely high ; it is the 35 days of exceptional weather that make the year's totals vary so much.

The number of days with high westerly winds of 20—50 m.p.h. during these 12 months is less than half of the 80 similar days in the previous 12 months (February, 1927 to April, 1928) for we had not a single westerly gale during the first three months of 1929 ; but these 32 days have given us much useful information. The three new turf walls round C, E_1 and E_2 have corroborated the evidence obtained in 1927/8 from D's wall to the effect that 10 ft. diameter turf walls with

sloping outer faces seem to correct the bad effect of turbulence which we find round the cylinder of a rain-gauge whenever a strong wind can blow against it. We also find that the type of wall round E_2 is distinctly less effective than that round E_1; the sloping lip of the wall round E_2 enables a westerly wind to blow into it and so create some turbulence, and loss of catch in a gale; while C's wall is slightly less effective than that round D. My own conclusion is that the crest of a turf wall of the shape described should be exactly horizontal and 3 or 4 inches higher than the lip of the gauge it has to surround.

If we compare the total catches of the normally exposed gauges B and F (14·06″ and 11·51″) for the 32 days, we find they bear much the same ratio to each other as they did in the 80 rough days of 1927/8 (when F = 80 % of B), but when we compare these with their turf-walled neighbours in their respective enclosures we find that F is quite 8 % behind E_1, while B is only $2\frac{1}{4}$ % behind C or D. This fact seems to imply that turbulence at 1 ft. above ground level may be three or four times greater on the side of a hill than on a level plain, which after all is only what every-day experience of country life would lead us to expect. But the turf walls round E_1 and E_2 show us that it is possible to catch a great deal of the rain that escapes the funnel of a bare gauge on a hillside, and the 86 % and 84 % of A which E_1 and E_2 have caught is probably not far off the true fall at the western enclosure on the weather side of Kilnflatt hill as compared with the 100 % catches of C and D, and this leads up to the conclusion that a gale blowing *up* a long slope does actually carry many raindrops over the top of the hill, and lets them fall somewhere on the leeward side.

During the 18 rough days of the six winter months when J and K were functioning, the total catches of E_1 and E_2 are 83 % and 81 % only of what C and D caught, while the total catch of J is 4 % *greater* than those of C and D; indeed during the six rough days of 20th–25th November J's total catch (3·96″) was 4 % above A and 7 % above D, while on the 23rd November, when a whole gale blew from the west and A caught 1·15 inches, J's catch of 1·24″ was 8 % more than A's and 12 % more than that of D (1·07″), while E_1 with 0·75″ was barely 66 % of A's 1·15 inches. Thus we have good evidence that a considerable proportion of the rain which was not able to come to ground on the weather side of the hill is actually falling on the lee side 40 yards east of C and D; but at this point the wood itself upsets our investigation, for we find that K is hopelessly behind every one of the ten gauges on the line of greatest exposure: the trees of the wood seem to collect many of the surplus rain drops that manage to get

past the spot where J awaits them, for we find that K's catch for 18 rough days averages only two-thirds of J, while on several occasions, including that of November 23rd, it has been less than half.

As we go further East, we pick up this missing rain and find that G caught the same quantity as C and D on the 18 days of winter gales, while H on the other hand is 3 % below them ; but H is much more exposed than is G to cross draughts of wind coming down the valley of the Dacre beck (*see* the contoured map), and since this 3 % difference may be partly due to turbulence round the gauge which a turf wall could eliminate, I propose to try the effect of one round H during next winter.

A comparison of the catches of A, K, G and H is helpful in considering the sheltering effect of trees. The absurdly low catches of K when the wind is at all high from the west, would seem to show that no ratio of h/d should be greater than $\frac{1}{2}$, while when this ratio gets down to $\frac{1}{4}$, as is the case with gauge H, a very slight shift in the direction of the wind may bring the gale round the end of a sheltering plantation. Probably in every exposed situation one should seek a sheltering plantation whose h/d lies between $\frac{1}{2}$ and $\frac{1}{3}$ for its stormy quarter.

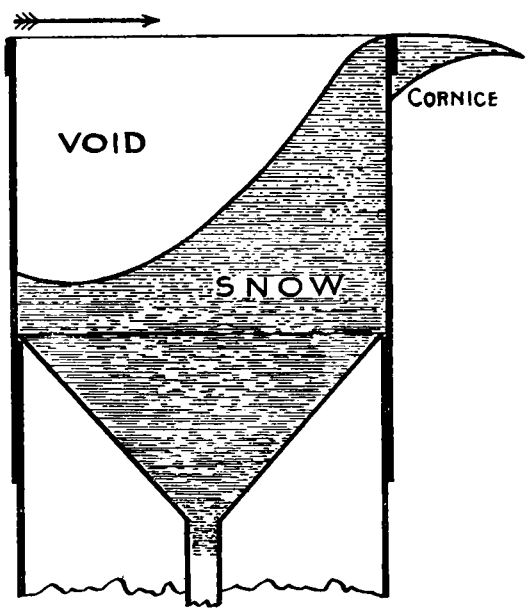
The table on page 260 has three lines (*d*) (*e*) and (*f*) that deal with certain forms of precipitation which are notoriously difficult to catch ; line (*d*) gives the records of a rough day when *wet sleet* fell continuously with a S. by W. wind of 20–25 m.p.h., and here we find the turf wall gauges far ahead of the bare gauges and yet notably near to each other.

Line (*e*) when $1\frac{1}{2}$ inches of *snow* fell on 24th February, 1929, with a slight easterly wind shows the turf wall gauges 100 per cent. above their bare neighbours and evidence in favour of the correctness of these catches is supplied by the fact that I took 7 " cheeses " of snow from 7 different places all round the two enclosures, and these " cheeses " when thawed, varied between 0·07″ and 0·12″, the total of the seven being 0·60″, i.e., an average of 0·086″ as against the 0·05″ of A, B and J. Now it is practically impossible to pick up off grass the whole of the snow in a " cheese " so that I am on fairly sound ground when I claim that the turf walls on this occasion could not have appreciably increased the catches of their gauges, but did in fact eliminate the bad effect of turbulence round a normally exposed gauge when snow is being blown across it.

The relative catches on this day of the normally exposed gauges H, G and K are what one would expect when a moderate wind blows snow *up* a sloping hill-side like that shown in the cross section on page 259.

The " *Blizzard* " records for 30th December, 1928, are interesting but rather confusing for it did not occur to me to take any " cheeses " off the grass on the morning of the 31st. The depth of snow at that

time on the ground varied from 3 inches to 4 inches, so that it does not seem probable that any of the gauges caught the true amount of precipitation at its particular site. Every one of the 11 gauge funnels was choked with frozen snow right up to the lip on its leeward side, but dished out on its windward side in varying degrees, and every funnel had a snow cornice attached to its leeward lip ; the capacity of the " void " inside the funnels varied greatly, and in my opinion must have been in inverse proportion to the catches I was able to measure after thawing the funnels, for the hard snow of the blizzard seemed to have choked the outlet pipes almost at once and the whole of the catch was in the funnel top. The very small catch of J is puzzling, but I incline to the view that the high wind robbed itself of much snow as it passed through the leafless wood by plastering it on the tree stems which were each and all covered with snow on their windward faces right through the wood from its eastern to its western fence, and consequently, there would be less snow left in the lower layers of wind by the time it reached gauge J, where turbulence caused by its 1/1 ratio of shelter towards the east would increase its difficulty in catching precipitation of any kind. As I went on from gauge to gauge that morning I formed the opinion that each funnel was " fed up " with snow, by which expression I mean to imply that the peculiar eddies of wind at each funnel lip would not permit any more particles of " blizzard " snow to remain at rest inside the funnel, in much the same way as one frequently finds a big " wreathed " drift in a roadway between walls, where the snow is undercut right down to the actual road surface by some swirl of the wind which will not permit a snow flake to remain there.



If the funnels *were* thus " fed up " it would, I think, follow that the ratio " volume of void "/" volume of frozen snow in the funnel " would bear some proportion to the degree of turbulence at that particular funnel lip ; i.e., the measured catch of each gauge on this particular occasion was inversely proportionate to the turbulence round it, and this notion seems to fit in with the facts enumerated below.

F's catch is 10% below that of its neighbour E.

B's ,, ,, 20% to 25% below those of C and D.

The eastern enclosure is much more exposed to a N.E. wind than the western one, so that F could not have had as bad conditions as B had on this occasion, although as we can see from line (*d*) a westerly wind with *sleet* disturbed F much more than B.

The experiments here have now been continued for three winters; they were commenced with the intention of discovering, if possible, how to overcome the apparently obvious failure of ordinary gauges in exposed positions and hillsides to catch the true rainfall at ground level, and various types of shelters have been tried. As the experiments went on and we collected information tending to prove that in strong winds much of the rain did not come to ground at all on the weather side of Kilnflatt Hill, Col. Gold suggested the addition of gauges on the lee side, and, accordingly, I set up gauges G and H in April, 1928, following them after a few months with J and K.

We cannot yet claim to have definitely solved the problems we set before us, but we have undoubtedly learnt something in this direction which we can summarise as follows.

I would remind my readers that these experiments have been confined to rain gauges of everyday use, i.e., 5 in. gauges of the deep "Snowdon" type funnel, with their lips 12 inches above ground and exactly level. It has long been known that if the plane of a gauge lip is inclined towards the wind, that gauge will catch more rain than if its lip were dead level, but this, to my way of thinking, is but a laboratory experiment, of little use to the waterworks engineer since his gauges must be fixtures and his need is to find out what rain actually falls to earth per acre of his gathering ground, whatever may happen to be the direction and force of the wind.

First, with regard to gauges which must of necessity be in exposed positions; the tests here with various forms of shields have shown pretty clearly that wire netting surrounds are rather detrimental to the effective action of a rain gauge; that heavy hurdles close to a gauge are worse offenders, and that any solid vertical barrier such as a stone wall is the worst of all shelters; but that a sloping turfed wall with smooth grass outer surface seems to enable a gauge to give a true record of the precipitation at its site, whether it be in the form of rain, sleet or snow—(always assuming that a gauge is not allowed to be completely buried by a heavy snowfall when it is of course put out of action)—for a smooth slope which is more or less of stream-line shape does not generate the turbulence that upsets the catching capabilities of a normally exposed, or bare, rain gauge.

The hopeless failure of my vertical palisade in 1926 seems also to indicate that a gauge should never be placed among or upon a mass of projecting rocks such as those spots chosen years ago for the early

gauges at the Stye and at Stye Head Tarn, for such sites are bound to increase turbulence, although they undoubtedly help to hide the actual gauge from the ken of idle and mischievous tourists.

If it be necessary to protect a gauge it would be well to remember that a three-wire fence of 12 yards square surrounding a sloping turf wall, like those round my gauges here, does not have any measurable deleterious effect, and if these wires be " barbed " they should at any rate discourage foolish tricks.

Secondly, as to position in a hill country. The three winters' records agree with each other that whenever strong S.W. winds blow up the S.W. slope of Kilnflatt Hill, the bare gauge F catches on the average only 80 per cent. of what the bare gauge B can catch, and this deficiency has pulled down F's grand total for the two years 1926/7 and 1927/8 to 95·71 inches as against B's 106·0 inches, i.e., the hillside rainfall at my western inclosure is 10 per cent. short of the hill top rainfall at my eastern inclosure on a whole year, *if* we are to believe that F's record is true, which is extremely doubtful.

My first attempt in November, 1926, to follow Symons' advice of a turf wall was the palisading round D and F (see the photo opposite p. 287, *British Rainfall*, 1926) as a rough imitation of a wall. Three months' records were sufficient to prove that this *vertical* wall increased turbulence considerably over that round a bare gauge, and F's palisade was pulled up in February, 1927, since when F has been a normally exposed, or bare, gauge.

At the same date D's palisade was buried in earth and converted into a " turf wall " 1 foot 3 inches high with a smooth grass outer slope of 1 in 3 (i.e., $7\frac{1}{4}°$), following the type of the M.O. experimental wall at Holyhead (see the diagram on p. 282 *British Rainfall*, 1926), and D's catches seem now to be accurate.

Since February, 1927, D's catch for a whole year has consistently been a little above that of gauge A, the old established garden gauge here which has an ideal shelter (h/d = 1 to 2·2) from all points of the compass save East, a quarter that hardly ever gives us any rain when wind is above force 3, but when it does do so, the catch of A is badly affected by the 7 ft. retaining wall of the terrace. Save for this peculiarity A's catch seems to be very near the true average catch of the locality; but snow, and rain that falls with a fresh easterly breeze, always put A below D, so that D's grand total is the largest of the four comparable records for 24 months.

	1927/8.	1928/9.		
A =	62·00″ and	44·72″ =	106·72″	100 per cent.
D =	62·88″ and	45·75″ =	108·63″	102 per cent.
B =	61·33″ and	44·67″ =	106·00″	99 per cent.
F =	54·79″ and	40·93″ =	95·72″	90 per cent.

On two occasions (2nd October, 1927, and 23rd November, 1928) I have had a " whole gale " blowing straight up the slope of 1 in 8 and on these occasions F's catch was barely two-thirds of B's catch, although the two gauges are but 45 yards apart. On this second occasion of a " whole gale " I had all eleven gauges functioning, and their comparison (which I have referred to above) is here given.

A	E_1	E_2	F	B	C	D	J	K	G	H
1·15	0·75	0·72	0·67	1·09	1·10	1·07	1·24	0·56	1·08	1·10 inches.
100	*66*	*63*	*59*	*95*	*96*	*93*	*108*	*50*	*94*	*96* per cent.

D, for some occult reason, is here below C and B, which is very unusual (and may indeed be merely " error " on my part, for these 11 records meant 29 separate operations with the $\frac{1}{2}$ inch glass measure, while a wind of, Force 6–7 was blowing me about) but the " way of a gale " is not easily understood, and our sheltering plantations round the house may perhaps have something to say in the matter if the wind gets definitely north of west while rain is still falling.

During the second spell of 12 months, when the four turf walls have all been functioning, E_2 is a little below E_1, and if, in conformity with the view I expressed earlier in this report, we take the " best catch " for comparison with D we get $E_1/D = \frac{12{\cdot}44}{14{\cdot}39} = 86{\cdot}3$ per cent. as *their* ratio of slope effect for the " 32 rough days," and $\frac{42{\cdot}87}{45{\cdot}75} = 93{\cdot}7$ per cent. as slope ratio for the whole 12 months. Thus the turf walled gauges have a 6 per cent. better slope ratio in rough weather than the bare gauges F and B, but the deficiency in catch is still very considerable, and I am convinced that it is an actual fact that *near the summit* of Kilnflatt Hill much rain is not able to come to ground on the windward slope when high westerly winds are blowing.

The catch of E_2 in rough weather is always 2 per cent. or 3 per cent. less than that of E_1, which seems odd when we know from numerous experiments that a gauge sloping towards the wind catches more rain than one with a horizontal lip. I have made several observations during strong westerly winds with floss silk streamers tied to little bamboos stuck into the ground inside these two craters, and I always find more turbulence in that of E_2. I attribute this to the fact that the leeward wall of E_2's crater is 9 inches higher than the windward edge and would naturally catch the wind and baffle it, thus creating turbulence inside the crater.

Now these two " craters " are in fact a couple of gigantic rain gauges of 10 feet diameter ; one of them (E_1) has its lip in a truly horizontal plane, while the other (E_2) has its lip parallel to the sloping surface of the hill side, and if they followed the observed custom of sloping 5 in. gauges, the crater of E_2 ought to catch more rain than the crater of E_1. But the gauge E_1 invariably catches more than the gauge E_2

in strong winds. I can only suggest that the relatively low elevation above ground level of the turf walls causes the wind to vary the intensity of catch throughout the 79 square feet of area in a manner which would not be noticeable in the sloping 5 in. gauges that other experimenters have used in their investigations, and I feel confident that a level topped "crater" is the right form to adopt for all turf wall shelters in exposed situations.

The string of gauges from J to H have not been working together very long, while 3 out of the 6 winter months when J and K were functioning were calm and dry; but as mentioned above on page 262 we have some very definite evidence that during high westerly winds of 20 to 50 m.p.h. there is an excess of rainfall on the leeward slope of Kilnflatt Hill for some considerable distance from its summit. This at first sight seems to be at variance with the conclusions of the Bavarian investigators on the "Hohenkarpfen" as summarised in the *Meteorological Magazine* for May, 1929, but the slope of the "Hohenkarpfen" seems to be 400 yards long and is very steep, for it equals 1 in 3; the gauges apparently were some 200 yards away from the summit, so that the comparison is not quite good. Perchance the "piling-up" of rain which I undoubtedly find here at my own gauge J, becomes dissipated on the "Hohenkarpfen" before the raindrops have reached those gauges. I find no excess of catch at my own gauge G which is exactly 195 yards E.N.E. of the absolute summit of Kilnflatt Hill and 25 yards lower.

As every one can tell from personal experience there is an increased velocity of wind up the windward slope of a hill, near the ground, which carries raindrops further up the hill than they would otherwise fall; but in a long slope this transference of drops would soon bring the intensity of fall to an average quantity, except near the summit where the time and distance required for this "averaging" might not be sufficient, and in that case would result probably in the shortage of catch that undoubtedly occurs in my western enclosure. The distance between gauges E_1 and D is but 40 yards, and would be covered in $2\frac{1}{2}$ seconds of time by a wind of only 30 m.p.h., while a whole gale would do it in half that time. Another 40 yards lies between D and J, so that 5 seconds in a strong breeze (30 m.p.h.) and $2\frac{1}{2}$ seconds in a whole gale (60 m.p.h.) would be the time interval from E_1 to J. Now small drops of rain can only fall through still air—(which does not really exist in a gale)—at a speed of 2 or 3 feet per second (p. xv. *British Rainfall*, 1925), therefore 10 to 15 feet of vertical distance would be as much as they could fall during the time they travelled from E_1 to J, so that the intensified velocity one feels on such a slope would be ample to transfer from E_1 to J many drops of small diameter and thus account for their different catches in high winds. I have recorded here quite

recently (2nd June, 1929) the following catches with a westerly breeze of barely 12 m.p.h. and rain of " drizzle " type, amounting to a considerable fall for the 24 hours.

	E_1	E_2	F	B	C	D	J
Inch.	0·23	0·23	0·22	0·26	0·26	0·26	0·27
In % of B, C or D	*92*	*92*	*88*	*100*	*100*	*100*	*104*

These variations are not very different from those I find in rough weather and high winds of four times the velocity and are, I submit, good corroborative evidence.

The results of the three years' experiments can be summarised thus—

1. That the turbulence caused by strong winds meeting the side of a bare gauge on a level plain will deprive it of not less than 2 per cent. to 3 per cent. of its proper catch ; while on a windward slope of not more than 1 in 8, a bare gauge near the summit of a hill or hillock will fail to catch anything between 10 per cent. and 15 per cent. of the quantity of rain that actually reaches the ground in rough weather when winds are of 20 to 50 m.p.h.

2. That this turbulence seems to be eliminated by the turf wall shelters described above, and the gauges thereby enabled to catch the true rainfall.

3. That no gauge, even with this turf wall shelter, can give trustworthy records of the rainfall on a gathering ground unless it be on a level plateau or on the leeward side of any hill or hillock in such gathering ground.

4. That when a gathering ground has a long steep slope (like that on the east side of Thirlmere), and it is considered advisable to install a gauge, one should look for a comparatively level shelf of (say) 40 yards wide on which to establish the gauge, and surround it with a turf wall of the type described on pages 259 and 262. Its records in that case will at any rate be not very far below the truth, whereas a bare gauge would be, undoubtedly, a false witness.

THE RAINFALL OF NORFOLK.

By JOHN GLASSPOOLE, M.Sc., Ph.D.

I. Introduction.

One of the aims of the British Rainfall Organization has been the preparation of maps showing the average annual rainfall on a scale of 2 miles to 1 inch for the whole of the British Isles. When the Geological Survey commenced, in 1903, the issue of a series of Water Supply Memoirs, Dr. H. R. Mill was invited to contribute chapters on rainfall. In this way, maps of certain counties [1] were prepared mainly on the scale of 2 miles to 1 inch. In addition, smaller areas were from time to time mapped for the purposes of Private Bill legislation and Water Power Schemes. Although the maps have not been published, the survey has been extended of more recent years to include the following counties :—Cambridge, Cheshire, Dorset, Hereford, Huntingdon, Norfolk, Nottingham, Shropshire, Somerset, Stafford, Wiltshire, Worcester, Monmouth, the whole of Wales, and the Isle of Man.

A comparison of the isohyetal lines on the early maps with those on the more recent ones, shows that considerably more use is now made of the contours of the land, which in the case of maps of the rainfall of months or years is the controlling factor. This is the result of the detailed study made by Dr. H. R. Mill and the late Mr. Carle Salter of the relation of the rainfall to the configuration of the land [2]. Reference to the map of the rainfall of June, 1903 [3], in comparison with those of recent months illustrates this point. The isohyetal lines on this map, as on other earlier maps, are invariably drawn at right angles to the coast line, whereas now they are in general drawn parallel to the coast. On theoretical grounds there is clearly no reason why one strip should receive appreciably more rain over a long period, than an

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[1] The Water Supply Memoirs for Bedfordshire, Essex, Hampshire, Kent, Lincolnshire, Northamptonshire, Nottinghamshire, Oxfordshire, Suffolk, Surrey, Sussex and Yorkshire (East Riding).

[2] See Trans. Inst. Water Engineers, Vol. 23 (1918), pp. 45–91. The *Relation of Rainfall to Configuration*, by Carle Salter.

[3] *British Rainfall*, 1903, p. 20.

adjacent equal area along the coast, whereas the increased elevation of the hinterland is ample reason for the increase of the rainfall from the sea to the land. This generalisation as to the run of the lines near the coast has been confirmed by the actual rain-gauge readings and it can be extended with confidence to those areas where no readings are available.

From actual observations the average rainfall is determined for a number of points. In drawing the map, estimates have to be made of the rainfall in adjacent regions by reference to the values at these points and the configuration of the land. The problem consists initially in deciding whether the adjacent areas are likely to receive more or less rain than these points. Observations are more numerous in valleys than on mountains and in order to determine the maximum rainfall, reference is made to such observations as give a measure of the increase in the rainfall up that mountain slope or an adjacent one with more data. It is necessary always to consider the effect of the configuration of the land in producing rising air, and not merely the elevation of that region.

The method used in preparing a map of average annual rainfall has been explained in an earlier volume of *British Rainfall* [4]," where a map of the Forth Valley is published. Isohyetal lines properly drawn, should, of course, show such a distribution that new values will fit into the map with very little modification of the lines. After the publication of the rainfall map of the Forth Valley, the Glasgow Corporation erected a number of rain-gauges over the area, and the late Mr. Carle Salter demonstrated in a paper before the Institution of Water Engineers, in 1924 [5] that the computed averages from the new gauges necessitated but slight modifications in the rainfall map. This is a definite confirmation of the value of the use of the known relation of rainfall to configuration in the absence of actual observations. In some cases, the new computed averages have not fitted particularly well, and it has been necessary to re-examine the configuration, in relation to the rainfall, to discover the faulty reasoning which led to the incorrect drawing of the isohyetal lines. In this way, the drawing of the rainfall maps in relation to the configuration of the land is continually being developed.

The following are some general principles based on experience in drawing the isohyetal lines :—

(*a*) Mountain ranges at right angles to the prevailing wind receive more rain than mountain ranges in the direction of the wind.

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[4] *British Rainfall*, 1915, pp. 24–34. *The Rainfall of the Forth Valley and the construction of a rainfall map.*

[5] Trans. Inst. Water Engineers, Vol. 29 (1924), pp. 76–82. *On the preparation of a Rainfall Map of the British Isles.*

Thus, Pendle Hill and the Cotswolds are not as wet as they would be if they were arranged in a direction from the south-east to north-west.

(*b*) Valleys which face the sea to the south-west have a small rainfall for a longer distance up them than similar valleys facing other directions.

(*c*) The maximum rainfall tends to occur on the leeward side of a mountain ridge, and

(*d*) Valleys surrounded by mountains on all sides, have high rainfalls. Thus, Seathwaite is only 400 feet above sea level, but its effective level from a rainfall point of view is 1,000 feet, or more, and its average rainfall as much as 129 inches a year.

While, perhaps, rainfall maps are more striking in areas where the orography is well developed, a study of the distribution in a relatively flat area is not without interest. The average annual rainfall over Norfolk is given as typical of an area with fairly uniform rainfall. It is an area where rain-gauges are comparatively numerous, so that the run of the lines can be defined with considerable precision. The variations in the rainfall of Norfolk are discussed not only in order to complete as far as possible a study of the rainfall of that county, but to indicate what information can be readily obtained about the rainfall of any county.

II. Average Annual Rainfall.

Fluctuations of Annual Rainfall.—A reasonably steady value for the average annual rainfall at any station can only be obtained by reference to a period of at least 35 years. The 35 years, 1881 to 1915, adopted for the Book of Normals ([6]) were utilised for the present investigation. In order to utilise short records, which do not cover the whole of this period, Table I has been constructed.

In the case of all records of rainfall complete for the years 1881 to 1915, the annual amounts have been expressed as a percentage of the average and the series where possible extended to 1928 and to 1868. Since these stations are representative of a large area, the percentage values for any year vary considerably, and they have accordingly been grouped in Table I in the river-divisions which have been used in *British Rainfall* since 1910. They are indicated in Fig. 1 (*Frontispiece*) by dotted lines. [7] For each of these divisions a general percentage

[6] The *Book of Normals, Section V*, Meteorological Office Publication, gives the average monthly and annual rainfall for 578 stations in the British Isles.

[7] The significance in the headings of Tables I and II of "c" is "and some land draining to the main river," while "C" is added to indicate "and other streams falling into the sea."

TABLE I.—*Fluctuations of Annual Rainfall* 1868 *to* 1928 *for Norfolk.*

Years.	River Basins. Yare. 1	Bure & c. 2	Stiffkeys & C. 3	Ouse & C. 4	Nene. 5	Whole Area.
	%	%	%	%	%	%
1868	84	87	103	86	101	88
1869	110	114	111	106	113	110
1870	84	83	88	85	91	85
1871	94	92	91	96	104	94
1872	141	136	139	143	157	140
1873	83	85	87	90	95	86
1874	82	83	80	85	90	83
1875	110	116	129	115	129	117
1876	117	119	136	116	137	120
1877	113	115	117	115	119	115
1878	116	128	122	115	110	119
1879	121	119	100	123	125	118
1880	111	103	120	121	135	115
1881	102	101	96	104	105	100
1882	126	121	120	125	123	124
1883	117	117	129	121	124	120
1884	82	86	84	78	82	82
1885	108	112	108	106	103	108
1886	100	104	108	101	114	102
1887	79	82	77	76	71	78
1888	97	96	93	95	94	95
1889	104	102	100	104	107	103
1890	94	95	84	93	88	93
1891	104	106	106	107	107	106
1892	112	111	99	110	105	109
1893	83	82	77	85	87	83
1894	107	106	102	107	105	106
1895	96	97	90	93	90	94
1896	98	94	104	105	104	101
1897	87	87	89	91	101	89
1898	87	84	77	85	88	84
1899	91	93	89	93	102	92
1900	107	107	117	106	109	108
1901	82	85	91	78	81	83
1902	85	86	89	83	91	85
1903	117	110	125	124	125	120
1904	87	85	88	84	78	86
1905	90	95	88	91	90	90
1906	108	110	108	105	107	107
1907	94	96	101	94	93	95
1908	88	89	86	89	81	88
1909	108	105	115	109	112	109
1910	118	117	115	115	107	116
1911	98	92	109	107	100	102
1912	136	139	142	136	137	137
1913	87	85	81	89	88	86
1914	105	105	102	99	93	103
1915	118	118	111	112	108	115
1916	120	119	117	120	123	119
1917	102	99	95	102	96	100
1918	114	110	119	115	108	114
1919	110	109	114	111	108	111
1920	90	88	86	95	97	91
1921	62	64	69	65	60	64
1922	114	121	122	111	109	115
1923	104	107	109	104	109	105
1924	113	107	102	113	112	110
1925	104	105	106	104	99	103
1926	97	96	100	99	96	97
1927	127	130	123	126	125	126
1928	102	100	102	107	110	103

value was obtained by taking the mean of values for certain stations. The stations utilised for each river basin are indicated in Table II. In some cases a station in an adjacent basin or country has been used to give a representative distribution; in such cases the station is printed in italics.

Table II.—*Long period stations utilised in the preparation of Table* I.

River Divisions. Area (sq mi.)	Yare 1. 658	Bure & c 2. 368	Stiffkeys & C 3. 288	Ouse & C 4. 683	Nene 5. 47
Stations :	Geldeston	*Yarmouth.*	Blakeney.*	St. Germans.	*Wisbech.*
	Norwich.*	*Norwich.**	Holkham.	Watton.	*St. Germans.*
	Cawston.	Worstead.	Little Massingham.*	Little Dunham.	—
	Yarmouth.	*Blakeney.**	—	*Walsham-le-Willows.**	—
	*Little Massingham.**	*Cawston.*	—	—	—
	*Walsham-le-Willows.**	—	—	—	—
	Watton.	—	—	—	—
		—	—	—	—

Stations printed in italics are situated just outside the river basin in question. * Adjustments were made by records at adjacent stations to complete the long-period record.

Computation of the Average Annual Rainfall.—In computing the average rainfall for the period 1881 to 1915, all the annual totals falling in that period were used. Where the record did not cover 10 years, the record was continued to 1928 so as to get reasonably long periods in all cases. Records prior to 1881 were also examined and the average computed in those cases where additional values were required to enable the isohyetal lines to be drawn with confidence. In these computations, use was made of the percentage values given in Table I, the appropriate series being used according to the river basin in which the station was situated. Thus, the record at Scole Rectory, in the extreme south of river division 1, was maintained for the 9 years 1891 to 1899. The mean rainfall for these years was 23·2 inches. Reference to the column of percentages under Yare 1, in Table I, indicates that these years were on the whole rather drier than that of the standard period 1881 to 1915. The mean of these percentage values in this column is 96·1, and increasing 23·2 inches in this ratio of 100 to 96·1, a corrected mean of 24·2 inches is obtained. With short records, the correction may be as much as 3 or 4 inches and in those cases the computed average is likely to be less reliable than with long records.

Critical Examination of the Averages.—All the computed averages were plotted on a map on a scale of 2 miles to 1 inch and the values compared with one another. The isohyetal lines were drawn at intervals of 1 inch (instead of at the usual intervals of 5 or 10 inches) and, consequently, the data were put to a more severe test than had hitherto been possible, since attention is directed to any value on the map which cannot be included, according to the principles set out in the introduction, in the appropriate zone. Reference to the original records enabled the causes of certain inconsistencies to be ascertained. By computing the probable annual average from adjacent stations, a measure of the extent of the inconsistency was obtained. Some mention of these inconsistencies may be enumerated under the headings of the probable causes, since a statement of the relative extent of defects of exposure, etc., in causing inconsistencies is of importance.

(*a*) *Height of the mouth of the gauge above ground.*—Certain of the records which were inconsistent, were found to be taken from gauges which were exposed with the mouth at heights above the ground not at the standard distance of 1 foot. A list of the computed errors and the height of the gauge above the ground is given below :—

Mouth of Gauge above Ground.	*Estimated Error.*
3 inch.	+1·8 inch.
3 ft. 0 ,,	−1·0 ,,
4 ft. 0 ,,	−0·7 ,,
4 ft. 10 ,,	−1·0 ,,

It has been shown [8] that if the mouth of the gauge is near the ground insplashing is likely to occur, and the gauge is liable to receive more than a fair sample of the rain falling in that locality. On the other hand, if the gauge is mounted in the air the wind eddies which are set up round the gauge tend to deflect rain from falling into the gauge and the catch is too small. The loss is greater in a more open exposure than in a sheltered one. Thus, there were cases where the gauge was exposed at greater heights than 1 foot where the computed average seemed to be in harmony with those from neighbouring records. It is, therefore, dangerous to dogmatise on the effect of raising the height of a gauge without taking into account the shelter afforded by surrounding objects.

(*b*) *Over-Shelter.*—In general, losses due to sheltering of the gauge are small, but in one case a computed average was 1·5 inch less than would have been expected from the map, and it was found that the gauge was close to a hedge which was given as 2 ft. high and 2½ ft. to the west of the gauge.

(*c*) *Non-standard Gauges.*—The records from a dial gauge, where the mouth of the gauge was 3 ft. above the ground, were on the average

[8] See for example *British Rainfall*, 1900, pp. 32–33.

2 inches less than would have been expected. While part of this loss may be due to the height of the gauge, it appears that low readings occurred, owing to the mechanism of the gauge failing to act properly, as is a common fault with such gauges.

There was one case of a Glaisher gauge which developed a leak and caught rather more than a standard gauge which was set up alongside for comparison.

(*d*) *Over-exposure.*—In one case a gauge gave 3 inches less than the expected amount. It was exposed on high land and must have been quite open to the full force of the prevailing wind. It was not possible, however, to inspect the gauge as the record had ceased.

While all these points are dealt with qualitatively in " Rules for Rainfall Observers," which was drawn up initially by the late Mr. G. J. Symons, F.R.S., for the guidance of observers, it has been possible in the present investigation to demonstrate the extent of the inconsistencies which have arisen when these rules were neglected.

The Map of Average Annual Rainfall.—The map of the average annual rainfall is reproduced as Fig. 1 (*Frontispiece.*). Direct information as to the rainfall is still wanting from the neighbourhood of Docking, Catfield, South Creake and West Beckham. The average annual rainfall, as shown by the map, is rather less than 23 inches along most of the southern border, and rather more than 25 inches along the north-east coast near Happisburgh. Inland the rainfall generally increases, exceeding 27 inches along the ridge of hills from Shipdham to Stanhoe and from Thursford to East Beckham. More than 28 inches most probably occur in the neighbourhood of Little Massingham, Docking, Swanton Novers and West Beckham, although it is only in the first area that there is direct evidence of this. Since only small areas in Norfolk are more than 300 feet above sea level, the increase in rainfall can be taken roughly as 5 inches for 300 feet, *i.e.*, 1·7 inch per 100 feet. This is quite a common figure for the east of England, although the increase is much greater in the mountainous regions along the west coast.

One feature of interest on the map is the steady increase in the rainfall even over quite flat country, e.g., of $2\frac{1}{2}$ inches from Fordham to Gooderstone. Presumably, the hills round Swaffham and Shipdham force air to rise at considerable distances to the west of these hills.

The general average annual rainfall has been evaluated for each river division and the values are set out in Table III, together with the computed volume of water in million gallons falling in each river basin.

It so happens that no record of rainfall is available for the small portion of Norfolk which drains to the River Nene, *i.e.*, River Division 5. Thus records outside the area have had to be used to define its rainfall.

Table III.—*General Average Annual Rainfall.*

River Division.	Area.	General Average Annual Rainfall.	Corresponding Volume in Million Gallons.
	Sq. mls.	ins.	
1. Yare	658	25·4	242,000
2 Bure & c	368	25·8	138,000
3 Stiffkeys & C ..	288	25·9	108,000
4 Ouse & C	700	24·8	251,000
5 Nene	30	23·8	10,000
Norfolk..	2,044	25·3	749,000

III. The Rainfall of 1922 and 1923 as Percentage of Average.

The rainfall of any year is considered as a percentage of the average for two reasons. In the first place, because it is difficult to appreciate from an isohyetal map whether any area is wetter or drier than the average, and, secondly, because the percentage map is practically independent of the configuration of the land and, therefore, simpler. While the range on any annual map of the British Isles is usually from 20 to 200 inches, that on the corresponding percentage map is much smaller, being usually from 60 to 150 per cent. In constructing annual maps for *British Rainfall* all values are used in the case of the isohyetal maps, but only a selected number in the case of percentage maps, since averages are not available for every station. The supposed simplicity of the percentage maps may, therefore, be due in part to the much smaller amount of data used. As averages have been computed in the case of Norfolk for all stations, it is possible, therefore, to prepare detailed percentage maps. This has been done in the case of the years 1922 and 1923 and the maps are shown as Figs. 2 and 3.

These maps are prepared from 45 records; and considerable improvement was possible on the maps published in *British Rainfall*, 1922 and 1923, where only 12 were available. They are still considerably simpler than that of Fig. 1 (*frontispiece*), which demonstrates the type of distribution found on each of the annual isohyetal maps. On the percentage maps, Figs. 2 and 3, the lines are drawn at intervals of 5 per cent., while on the isohyetal map, the lines are at intervals

RAINFALL 1922
as per cent of average 1881-1915

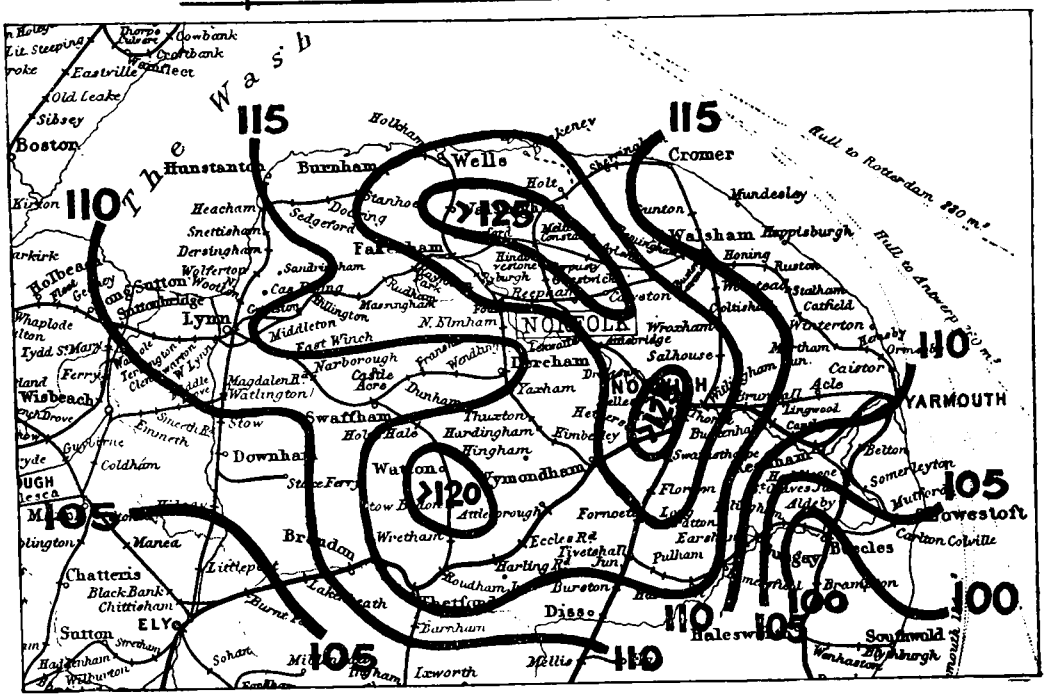

FIG. 2

RAINFALL 1923
as per cent of average 1881-1915

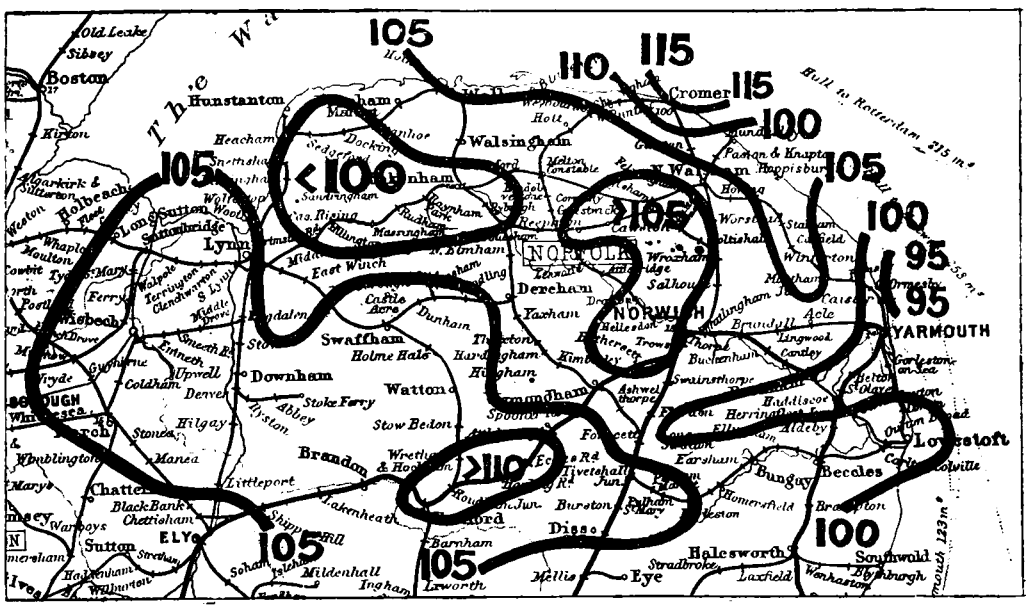

FIG. 3

of 1 inch. Since the rainfall of this region is about 25 inches the intervals between the lines on the two types of maps are comparable. So that the fewer lines on the percentage maps indicate the relative simplicity of these maps even when all the available data are used. The range on the annual maps is moreover usually larger than on the average map. It was 12 and 9 inches in 1922 and 1923, respectively, compared with only 6 inches on the average map. (The ranges on the percentage maps for 1922 and 1923 are only 29 and 25 per cent.) The range of the average annual rainfall in Norfolk is small and the relative simplicity on the percentage map would, therefore, be much more marked in mountainous regions.

In one or two cases, even when the computed average fitted on the isohyetal map, the percentage values were inconsistent and had to be rejected. Thus, the effect of a leak, although well marked for individual years, may be insignificant when the defective years are added to a series of reliable years.

Fig. 2 indicates that in 1922 the rainfall exceeded that of the average map everywhere in Norfolk except near Beccles. Rather more than 125 per cent. of the average fell near Norwich and Walsingham. In 1923 (Fig. 3) there was less than the average round Yarmouth and Fakenham, and more than 110 per cent. near Thetford and Cromer.

IV. Fluctuations in the Rainfall of Norfolk.

The fluctuations in the rainfall of Norfolk are considered for different intervals of time, for two stations, Geldeston, near Beccles, in the south-east of the county, and Little Dunham, near Swaffham, to the west of the county. These stations give a good indication of the fluctuations which have been experienced over the county in the last sixty years.

(a) *Rainfall of the period* 1881 *to* 1915 *in comparison with that of other groups of* 35 *years falling in the period* 1868 *to* 1926.

In constructing the map of average annual rainfall the standard period of 35 years, 1881 to 1915, was used. If any other group of 35 years in the period 1868 to 1926, had been used the greatest change produced in the east of Norfolk would have been ±·25 inch. In the west of Norfolk the average would have varied from +·75 to −·50 inch from that of the standard period.[9]

[9] *See* also *A comparison of* 35*-year rainfall averages over the British Isles for different groups of* 35 *years falling in the period* 1868 *to* 1921. *British Rainfall*, 1923, pp. 238–256.

The earliest groups of 35 years were wetter than the standard period, those after 1881 to 1915 were generally slightly drier, while recent wet years have resulted in the last groups being slightly wetter than the standard period.

(b) *Extremes of Annual Rainfall.*

The driest year over the whole of Norfolk, as indicated by Table I, was 1921. In that year less than 60 per cent. of the average fell to the south-east of a line roughly from Yarmouth to Torquay, including the southern half of Norfolk. Along a coastal strip of the extreme north of the county, where 1921 was not so remarkably dry, the year 1898 was rather drier.

The two wettest years, as indicated in Table I, were 1872 and 1912. The year 1912 was wetter in a central strip of the county, but on either side the totals of that year were exceeded by 1872. In the west of the county there was more than 160 per cent. of the average in 1872.[10]

Table IV.—*Details of the Driest and Wettest Years in the series 1868 to 1928.*

Station.	Average 1881 to 1915.	Driest Year.			Wettest Year.		
		Amount.	Per Cent.	Year.	Amount.	Per Cent.	Year.
	in.	in.			in.		
Geldeston nr. Beccles ..	23·69	11·85	50	1921.	33·91	143	1872.
Little Dunham	27·19	16·91	62	1921.	44·46	164	1872.

The extreme values for the two stations used previously, as representative of Norfolk, are set out in Table IV.

(c) *Extremes of Monthly Rainfall at two stations in Norfolk.*

The extremes for each month at Geldeston, near Beccles, and at Little Dunham are set out in Table V(*a*) and (*b*). The driest month was February, 1891, which was one of the driest months over the British Isles as a whole. The year 1893, famous for the spring drought, provided the lowest falls in March and April. The driest year in the series, 1921, is not represented in the table, although less than half an inch was recorded in the months February and June.

[10] Further details are given in *The Driest and Wettest Years at Individual Stations in the British Isles*, 1868 *to* 1924. Q.J.R. Meteor. Soc., Vol. 52 (1926), pp. 237–248, while maps showing the rainfall of each year in the series 1868 to 1923, as a percentage of the average, are published by the Royal Meteorological Society in the *Rainfall Atlas of the British Isles*.

Table V.—*Extremes of Monthly Rainfall.*

(a) *Geldeston, near Beccles,* 1866 *to* 1928.

Month.	Driest Month.		Wettest Month.	
	Rainfall.	Year.	Rainfall.	Year.
	in.		in.	
January	·17	1880	3·66	1906, 1922
February	·05	1891	3·96	1866
March	·27	1893	3·50	1914
April	·11	1893	3·48	1918
May	·42	1927	4·15	1924
June	·16	1887	3·50	1905, 1916
July	·25	1868	5·53	1915
August	·46	1911	7·56	1912
September	·28	1898	5·15	1885
October	·38	1920	7·39	1892
November	·60	1920	6·95	1878
December	·39	1873	5·51	1914

(b) *Little Dunham,* 1868 *to* 1928.

Month.	Driest Month.		Wettest Month	
	Rainfall.	Year.	Rainfall.	Year.
	in.		in.	
January	·23	1880	4·71	1928
February	·07	1891	4·47	1916
March	·26	1893	3·71	1914
April	·11	1893	3·78	1871, 1876
May	·44	1868	4·98	1878
June	·32	1887	5·37	1927
July	·25	1911	6·32	1875
August	·55	1871	8·27	1912
September	·20	1898	5·49	1918
October	·89	1922	7·04	1892
November	·90	1920	6·52	1878
December	·57	1890	6·12	1914

October, 1892, August, 1912, and November, 1878, rank as the three wettest months. The rainfall of November, 1878, was accompanied on the 16th by the deepest flood at Norwich since 1614, rising 7 ft. above the usual level of the river. The flood of August, 1912, exceeded that of 1614 by some 15 inches.

In Table VI extremes of rainfall are given for consecutive groups of 1 month, 2 months, etc., up to 12 months at the two representative stations.

Table VI—*Least and greatest Rainfall in groups of consecutive months.*

(a) *Geldeston, near Beccles,* 1866 *to* 1928.

	Driest Period.			Wettest Period.		
	Period.	Amount.	Per Cent. of Annual Average.	Period.	Amount.	Per Cent. of Annual Average.
		In.	%		In.	%
1 Month	February, 1891	·05	0·2	August, 1912 ..	7·56	32
2 Months	Mar.-April, 1893	·38	1·6	July-August, 1912	10·86	46
3 ,,	Mar.-May, 1893 / May-July, 1868	1·66	7·0	July-Sept., 1879..	13·99	59
4 ,,	Mar.-June, 1893	2·83	12	June-Sept., 1879	16·97	72
5 ,,	Feb.-June, 1921	3·41	14	May-Sept., 1879	19·35	82
6 ,,	Feb.-July, 1921	3·87	16	April-Sept., 1879	21·63	91
7 ,,	Feb.-Aug., 1921	4·97	21	April-Oct., 1879	22·99	97
8 ,,	Feb.-Sept., 1921	6·38	27	April - Nov., 1879	25·62	108
9 ,,	Feb.-Oct., 1921	6·98	30	April - Dec., 1872	27·39	116
10 ,,	Feb.-Nov., 1921	8·59	36	Nov. '78–Aug. '79	31·14	132
11 ,,	Feb.-Dec., 1921	10·20	43	Nov. '78–Sept. '79	34·51	146
12 ,,	Jan.-Dec., 1921	11·85	50	Oct. '78–Sept. '79	36·09	152

(b) *Little Dunham* 1868 *to* 1928.

	Driest Period.			Wettest Period.		
	Period.	Amount.	Per Cent. of Annual Average.	Period.	Amount.	Per Cent. of Annual Average.
		In.	%		In.	%
1 Month.	Feb. 1891 ..	·07	0·3	August, 1912 ..	8·27	30
2 Months	Mar.-April, 1893	·37	1·4	Aug.-Sept., 1912	11·22	41
3 ,,	May-July, 1868	1·42	5·2	June-Aug., 1879	15·06	55
4 ,,	Mar.-June, 1893	3·25	12	June-Sept., 1879	18·51	68
5 ,,	Feb.-June, 1921	5·65	21	July-Nov., 1872	22·57	83
6 ,,	Feb.-July, 1921	6·68	25	July-Dec., 1872	27·26	100
7 ,,	Feb.-Aug., 1921	8·52	31	June-Dec., 1872	31·17	115
8 ,,	Feb.-Sept., 1921	9·56	35	May-Dec., 1872	34·10	125
9 ,,	Feb.-Oct., 1921	11·42	42	April-Dec., 1872	36·68	135
10 ,,	Feb.-Nov., 1921	12·88	47	Mar.-Dec., 1872	39·35	145
11 ,,	Feb.-Dec., 1921	14·55	54	Mar. '72–Jan. '73	41·37	152
12 ,,	Jan.-Dec., 1921	16·91	62	Jan.-Dec., 1872	44·46	164

(d) *Heavy falls of rain on rainfall days.*

The most widespread heavy rain in Norfolk was that of the 25th to 26th August, 1912, when more than 3 inches of rain fell everywhere, reaching 8·09 inches at Brundall to the east of Norwich. It was the most widespread rain of such an intensity on record in the British Isles. The damage was enormous, and much sediment carried down from the upper parts of the rivers was deposited in the Broads. The total volume of water, in addition to the normal flow of the river, discharged at Yarmouth by the Yare and Bure was estimated to be 103,123 million gallons and its weight 466,360,000 tons (this includes some water draining from an area in Suffolk). As much as 7·31 inches was recorded at Brundall on the rainfall day of August 26th, 1912. This amount is known to have been exceeded on 5 occasions only in these islands. [11] In the last 60 years there has been only one other instance of a fall exceeding 4 inches in Norfolk, *viz.*, 4·48 inches at Fakenham, on 11th July, 1893. The effect of the heavy fall of rain of the 25th and 26th August on the average annual amount is very small, being only about ·2 inch.

(e) *Heavy falls in short periods.*

The rainfall of the 25th and 26th August was sustained rather than intense. So far as can be ascertained, 4·9 inches of rain fell in 6 hours, although the intensity probably never reached 1·50 inch in one hour even at the wettest stations. The fall of the 14th July, 1917, recorded at Ipswich Road, Norwich, was far more intense while it lasted, since as much as ·47 inch fell in 2½ minutes, *i.e.*, at the rate of 11·28 inches per hour. The rain of August, 1912, was typically cyclonic, while that of July, 1917, was of the thunderstorm type and there was hail of exceptional size, measuring 3½ to 4 inches in diameter.

(f) *The average monthly rainfall.*

The preparation of a series of maps showing the average monthly rainfall over Norfolk on a scale of 2 miles to 1 inch has not yet been undertaken, but the general distribution in each month is undoubtedly similar to that shown in Fig. 1 (*frontispiece*).[12] An estimate has been made, however, of the amount of rain falling in each month in the various river divisions. From the 10 records, published in the Book of Normals, the percentage of the annual average falling in each month has been evaluated.

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[11] Further details of *The Great Rain Storm of August 25th–26th*, 1912, are given in *British Rainfall*, 1912, pp. 28–47, and in a paper on *The Unprecedented Rainfall in East Anglia*, August 25th–26th, 1912, by Dr. H. R. Mill, published in the Q.J.R. Meteor. Soc. ,Vol. 39 (1913), pp. 1–28.

[12] The average monthly rainfall over the British Isles is shown on the scale of 65 miles to 1 inch in the *Rainfall Atlas of the British Isles*, published by the Royal Meteorological Society, 1926.

Table VII.—*Average Monthly Rainfall*, 1881—1915, *over Norfolk.*

	Percentage of Year.	Inches.
January	7·2	1·8
February	6·1	1·6
March	7·1	1·8
April	6·0	1·5
May	7·1	1·8
June	8·0	2·0
July	9·9	2·5
August	9·9	2·5
September	8·1	2·1
October	11·5	2·9
November	9·6	2·4
December	9·5	2·4
Year	100·0	25·3

These values were plotted on 12 maps and estimates read off of the general percentage for each river division. The values show little variation among themselves but those for the whole county are given as percentages in Table VII. The values have been applied to the general rainfall given in Table III to obtain estimates of the monthly rainfall in actual inches.

(g) *Seasonal Rainfall.*

The rainfall of the winter months is of fundamental importance for the maintenance of rivers and for the general irrigation of the land, since that of the summer months very largely re-evaporates. Over the whole of Norfolk rather more rain falls in the winter than in the summer, the average values obtained from Table VII being 12·9 inches for the winter months, October to March, and 12·4 inches or the summer months April to September.

The average values and the extreme values for the summer, winter and seasonal year are set out for the two stations in Table VIII.[13] At both stations the rainfall of the winter exceeds that of the summer for the period 1881 to 1915. The summer rain is, however, more variable, the range exceeding that of the winter by 4 inches at both stations.

[13] *See* also *Average and Extreme Seasonal Rainfall over the British Isles.* Trans. Inst. Water Engineers, Vol. 33 (1928), pp. 51–69.

Table VIII.—*Averages and Extremes of Rainfall in the winter, summer and seasonal year.*

(a) *Geldeston extremes for* 1866 *to* 1928.

	Average 1881 to 1915.	Driest Season.		Wettest Season.	
		Inches.	Year.	Inches.	Year.
	in.				
Winter (Oct.-Mar.) ..	12·20	6·63	1873–74	18·80	1914-15
Summer (April-Sept.) ..	11·49	5·37	1921	21·63	1879
Seasonal Year (Oct.-Sept.)	23·69	12·14	1920-21	36·09	1878–79

(b) *Little Dunham, extremes for* 1868 *to* 1928.

	Average 1881 to 1915.	Driest Season.		Wettest Season.	
		Inches.	Year.	Inches.	Year.
	in				
Winter (Oct.-Mar.) ..	13·63	8·80	1920–21	20·54	1882–83
Summer (April-Sept.) ..	13·56	7·90	1921	23·66	1879
Seasonal Year (Oct.-Sept.)	27·19	16·70	1920–21	39·74	1878–79

The rainfall of the wettest winter was as much as usually falls in 9 months, the rainfall of the driest summer was only about that which usually falls in 3 months.

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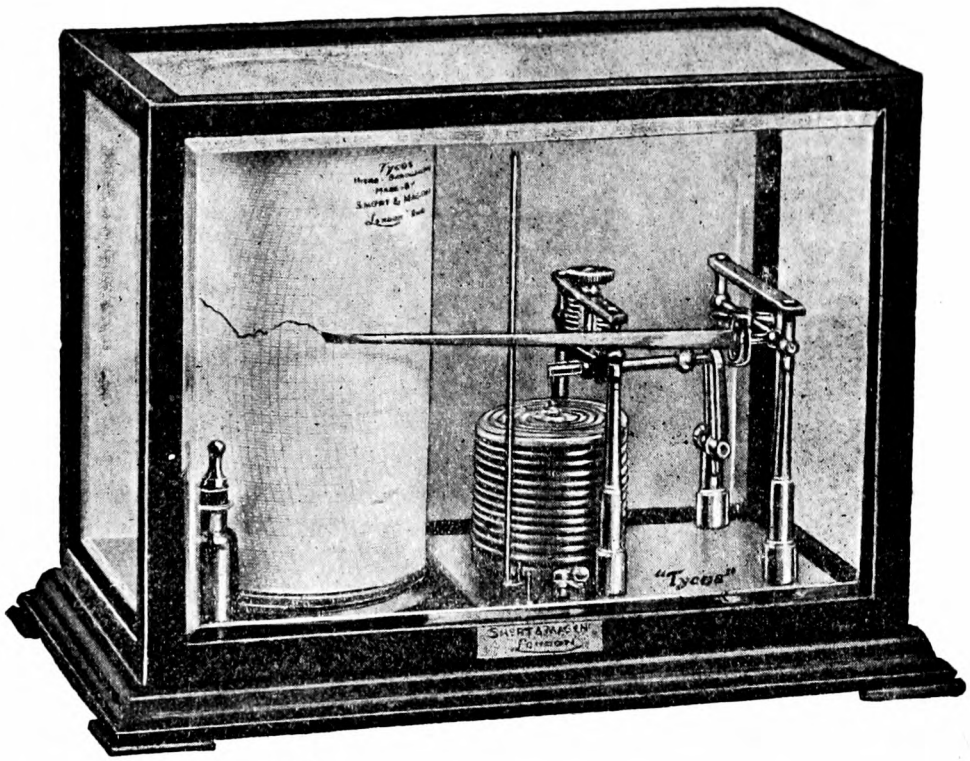

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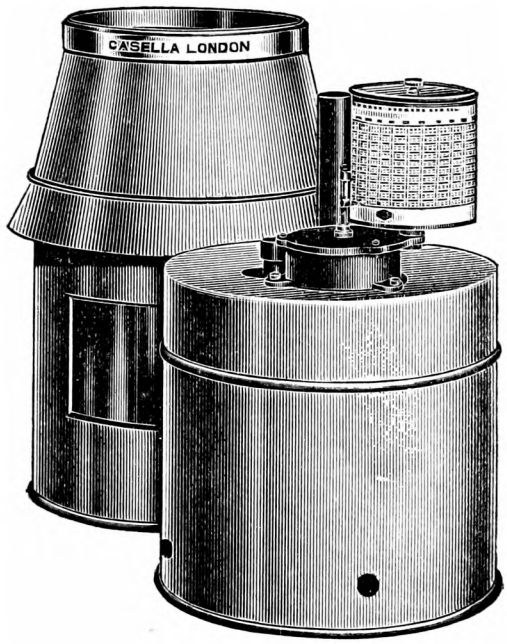

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